Unintended Consequences of Granting Small Firms Exemptions from Securities Regulation: Evidence from the Sarbanes-Oxley Act

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Abstract: This paper provides evidence about the unintended consequences arising when small companies are exempted from costly regulations – these firms have incentives to stay small. The SEC has on various occasions from 2003 – 2006 postponed compliance with Section 404 of the Sarbanes-Oxley Act of 2002 (SOX) for "non-accelerated filers" (firms with public float less than $75 million). We hypothesize and find that some of these firms had an incentive to remain below this bright line threshold. Moreover, we document that these firms remained small by undertaking less investment, making more cash payouts to shareholders, reducing the number of shares held by non-affiliates, making more bad news disclosures and reporting lower earnings than control firms. These findings have implications beyond SOX because numerous federal and state regulations exempt small firms via bright line size thresholds.

Keywords: unintended consequences, regulations, Sarbanes-Oxley Act, Section 404
JEL classification: G18, G31, G32, G35, K22, M41

1. Introduction

Economists have long recognized that government regulations often generate unintended consequences.[1] The initial Securities Act of 1933 and the Securities Exchange Act of 1934 exempted small firms from certain filing requirements. The SEC expanded these exemptions in implementing the Sarbanes Oxley Act of 2002 (SOX). Beyond securities regulations, numerous statutory and regulatory exemptions exist for small businesses (Bradford, 2004). This paper presents evidence that exempting small firms from restrictive regulatory requirements (SOX in this case) generates the unintended consequence of creating incentives for some of these firms to remain small.

SOX aims to better protect investors via a variety of new regulations that impose rather substantial compliance costs on filing companies.[2] Commentators point out that SOX can undesirably reduce management risk-taking incentives, distort corporate disclosure, impede the flow of internal information, and reduce firms' ability to attract qualified managers and directors (Ribstein, 2002; Romano, 2005; Holmstrom and Kaplan, 2003; Bargeron et al., 2007). Some empirical evidence suggests that SOX imposed net costs on shareholders (Zhang, 2007) and bondholders (DeFond et al., 2007), and especially high costs on small firms (Iliev, 2007). Moreover, small filers alleged that the costs of SOX are disproportionate to the benefits.[3] However, the debate over whether SOX was on net costly is far from settled (Leuz, 2007).

We hypothesize that the enactment of SOX created incentives for certain firms to stay small – in particular to keep their public float below $75 million, the threshold in the SEC's

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[1] By "unintended consequence" we mean that one of the outcomes of the regulation was either unanticipated by the regulator or not the objective of the regulation. See Averch and Johnson (1962), Merton (1936), Stigler (1971), and Spatt (2006).

[2] See, Coates (2007), Romano (2005), Ribstein (2002), Cohen, et al. (2005), and Linck, Netter, et al. (2007), Iliev (2007) for a discussion of the compliance costs and a variety of other consequences generated by SOX.

[3] *Final report of the Advisory Committee on Small Public Companies to the United States Securities and Exchange Commission*, April 23, 2006.

definition of "non-accelerated" filers.[4] Since 2003, the SEC has on several occasions deferred the implementation deadline for non-accelerated filers regarding Section 404 of SOX.

Section 404 requires managers to document and assess the effectiveness of internal controls and their external auditor to attest and report on management's assessment. SEC filers and other commentators view Section 404 as one of the most onerous parts of SOX (e.g. Zhang, 2007). Section 404's requirements are designed to apply to all public companies regardless of size. However, from the outset small businesses strongly opposed the one-size-fits-all regulatory approach. Due to the fixed component in compliance costs, small firms are disproportionately impacted relative to large firms (e.g. Eldridge and Kealey, 2005; A.R.C. Morgan, 2005); they had to compete with large firms for the post-SOX limited supply of auditors and faced a sharp rise in audit costs.[5] Also, small businesses argue that their ability to remain nimble and competitive in the market place is incompatible with Section 404's mandate for well-defined internal control processes and clearly-segregated within-firm-boundaries.[6]

In response to the concerns expressed by small businesses, the SEC extended the compliance deadline for non-accelerated filers when it adopted its final rules regarding Section 404 on May 27, 2003. The extension raised expectations of more extensions and possible eventual exemption to complying with Section 404 for non-accelerated filers.[7] Zhang (2007) and Iliev (2007) report that non-accelerated filers receiving additional time to comply with Section

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[4] Public float is defined by the SEC as the aggregate market value of voting and non-voting common equity held by non-affiliates of the issuer. "An affiliate is a person, such as a director or large shareholder, in a relationship of control with the issuer. Control means the power to direct the management and policies of the company in question, whether through the ownership of voting securities, by contract, or otherwise." (www.sec.gov/investor/pubs/rule144.htm)

[5] See for example the *Wall Street Journal* editorial on August 15, 2005 "*Sarbanes-Oxley is a curse for small-cap companies*" by the Chairman and CEO of the American Stock Exchange.

[6] *Final report of the Advisory Committee on Small Public Companies to the United States Securities and Exchange Commission*, April 23, 2006.

[7] An extension subsequently granted to accelerated filers brought their final compliance deadline to fiscal years ending on or after 11/15/2004. The non-accelerated filer compliance deadline was extended several more times to 12/15/2007. More details are provided in Table 1.

404 experienced statistically significant positive abnormal stock returns at the announcements of the various extensions. One interpretation of these findings is that the market viewed the deferral of Section 404 and the possible eventual exemption of non-accelerated filers from Section 404 as firm-value enhancing.

At least two non-mutually exclusive reasons can motivate managers to retain their firm's non-accelerated filer status: (i) they believe that complying with Section 404 reduces shareholder value, and/or (ii) they believe that Section 404 reduces their private control benefits. We do not differentiate between these two motives. Rather, at this early stage in the research we focus on more modest goals – documenting that regulatory size thresholds in fact induce some firms to remain below the threshold and identifying the various methods used to accomplish this objective. Differentiating among these two motivations is the logical next step.[8]

Given that managers want to stay small for whatever reason(s), we hypothesize that managers of non-accelerated filers undertake a series of actions to maintain their firm's "non-accelerated filer" designation by keeping their public float below $75 million. On the other hand, the $75 million threshold is likely of little relevance for an accelerated filer even if it has a public float close to $75 million because once classified as an accelerated filer, stringent requirements must be satisfied to exit that status.[9]

In our tests, we compare non-accelerated filers with a control sample of accelerated filers. We restrict our control sample to firms with market capitalizations below $150 million to avoid including as control firms large companies that might be vastly different from non-accelerated

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[8] Another reason to defer differentiating between the motives to remain small is the lack of a well developed theory of corporate governance and corresponding reliable empirical proxies (Larcker et al., 2007).
[9] As detailed in Table 1, prior to December 2005, to exit the accelerated filer status a company must become a Small Business Issuer with public float and revenues less than $25 million for two consecutive years. In December 2005, the SEC issued new rules that allowed a company to exit the accelerated filer status in the same year when its public float drops below $50 million.

filers. Our event period spans June 1, 2003 (following the first SEC deferment of Section 404 compliance deadline for non-accelerated filers) to December 31, 2005 (soon after the SEC issued the new exit rule for accelerated filers, see footnote #9). In order to isolate the effect of SOX, we also construct a control period from January 1, 1999 to September 1, 2001, which ends before the legislative activities leading to SOX and before the SEC introduced the "accelerated" and "non-accelerated filers" distinction. In the pre-SOX control period we assign pseudo-identifiers to firms as either accelerated filers or non-accelerated filers according to the later SEC definitions. Our test design is therefore one of difference-in-differences where we compare the post-SOX differences between non-accelerated filers and accelerated filers to the corresponding pre-SOX differences.

We document several actions that non-accelerated filers appear to employ to keep their public float below the $75 million threshold post-SOX. Since a firm's public float is determined by its share price and by the number of common shares held by non-affiliates, both can be used to manage public float. Consistent with this, we find that post-SOX non-accelerated filers --

1) *Take actions related to various corporate policies to stay small:*
   - *reducing net investment in property, plant, and equipment, intangibles, and acquisitions*
   - *paying out more cash to shareholders via ordinary and special dividends and share repurchases*
   - *decreasing the number of shares held by non-affiliates*

Because the testing date of a firm's filing status occurs only once each fiscal year (the last trading day of its second fiscal quarter), we also document various techniques adopted by non-accelerated filers post-SOX to exert temporary downward pressure on share prices before testing their filing status --

2) *Actions related to short-term price impact:*
   - *Disclosing more bad news in the second fiscal quarter*
   - *Reporting lower accounting earnings in the second fiscal quarter*

Furthermore, we find evidence that the non-accelerated filers' incentives to undertake the above actions are weaker when they are further away from the $75 million threshold. Finally, we document that the various actions undertaken by the non-accelerated filers post-SOX appear to be effective in that these firms are more likely to remain below the $75 million threshold in the following year.

Our paper is related to two concurrent studies -- Iliev (2007) and Nondorf et al (2008). Iliev (2007) reports that compared to non-accelerated filers, accelerated filers paid higher audit fees and experienced significantly lower stock returns in their first year of Section 404 compliance. He also suggests that some non-accelerated filers manipulated their 2004 public float to avoid compliance with Section 404. Nondorf et al. (2008) find that firms with public float around $75 million reduce their float temporarily during their second fiscal quarter compared to other firms via lower stock returns and more insider buying. Our paper differs from these two papers in several ways. Iliev (2007) focuses on the costs imposed on Section 404 complying firms, not the actual mechanisms used by firms to avoid compliance. Nondorf et al. (2008) include both accelerated and non-accelerated filers in their "threshold" firms thereby making it difficult to interpret their findings.

Our study makes several contributions. First, we provide evidence on the economic consequences of exempting small companies from regulation. The Advisory Committee on Small Public Companies (2006) recommended less onerous regulatory rules for small filers, and the SEC is proposing rules to systematically adopt these recommendations.[10] Our evidence suggests that when regulations entail large costs for small businesses, one of the unintended

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[10] The Advisory Committee on Small Public Companies was established by the SEC in March 2005 to "assess the current regulatory system for smaller companies under the securities laws of the United States, and make recommendations for changes." (*Final report of the Advisory Committee on Small Public Companies to the United States Securities and Exchange Commission*, April 23, 2006). SEC Release No. 33-8812 and No. 33-8819

consequences of these exemptions is that some firms have incentives to remain below the bright line thresholds. While this result is consistent with firms having incentives to avoid costly regulation, it does not address the broader question of whether exempting small firms from regulation benefits society.

Second, we document a heretofore unrecognized consequence of SOX – non-accelerated filers keeping their public float below $75 million. Prior studies suggest SOX can change a firm's cost-benefit tradeoff of participating in U.S. public capital markets (Engel et al., 2007; Leuz et al., 2007; Piotroski and Srinivasan, 2007; Hostak et al., 2007; and Gao, 2007). Our results indicate that for firms remaining public, SOX also altered their incentives to grow. Lower growth has social welfare implications if it affects employment, wealth creation, and real investment.

Finally, we provide additional evidence on the economic consequences of SOX and in particular, its Section 404 provisions on internal controls, for small public companies. A common theme emerging from prior studies is that SOX more adversely affects small firms (Engle et al., 2007; Leuz et al., 2007; and Piotroski and Srinivasan, 2007). Our findings add to this literature and are consistent with the view that Section 404 of SOX imposes net costs on small businesses (e.g. Ribstein, 2002; Gordon, 2003; Romano, 2005; Holmstrom and Kaplan, 2003).

Our paper's implications extend beyond the several hundred small firms approaching the $75 million public float threshold that deferred implementing Section 404. The SEC has differential reporting requirements for "small business issuers" (less than $25 million in revenue and public float), "accelerated filers" (public float in excess of $75 million), and "large accelerated filers" (public float in excess of $700 million). In addition to these entry thresholds,

the SEC has defined other thresholds to exit the accelerated and large accelerated reporting requirements.[11] The SEC is evaluating proposals whereby filing requirements are proportional to the filer's size with three new thresholds that correspond to "microcap companies," "smallcap companies," and "larger public companies." Besides these SEC size thresholds, Federal and state statutes and regulations contain numerous exemptions for small businesses (Bradford, 2004). Two federal statutes, the U.S. Regulatory Flexibility Act and the Small Business Regulatory Enforcement Fairness Act of 1996, require federal agencies to consider exemptions or reduced standards for small businesses. Agencies ranging from the FDA to the U.S. Defense Department provide preferential treatment for small firms using bright line thresholds. While this study focuses on a narrow set of firms trying to avoid Section 404 compliance, its inferences (if confirmed in other settings) suggest that numerous firms likely have incentives to stay below explicit size thresholds.

The remainder of the paper is organized as follows. We first describe in Section 2 the institutional background to the SEC's definition of "non-accelerated filer" and the several postponements of the compliance deadline for Section 404. We develop our hypotheses in Section 3. Descriptions of our methodology are in Section 4. Section 5 presents the evidence related to non-accelerated filers' propensity to stay below the size threshold. Section 6 investigates the specific actions undertaken by non-accelerated filers to accomplish their goal of staying small post-SOX. Section 7 concludes the paper.

2. Institutional background

2.1. "Accelerated filers" versus "non-accelerated filers"

From its inception, U.S. federal securities regulation contained exemptions for small

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[11] SEC Release No. 33-8644 and 34-52989, issued on December 21, 2005. As noted earlier in footnote #9, prior to December 2005 an accelerated filer needs to become a small business issuer to exit the accelerated filer status.

companies. In 1992, the SEC introduced the concept of "Small Business Issuers," (filers with revenues and public float below $25 million), and applied abbreviated disclosure rules to them. The enactment of SOX in 2002 reignited concerns about undue regulatory burdens for small companies. The September 5, 2002 SEC final rules requiring accelerating filing deadlines for annual and quarterly reports introduced the concepts of "accelerated filers" and "non-accelerated filers" (Release No. 33-8128). This rule gradually shortened the filing deadlines for annual and quarterly reports. The SEC exempted non-accelerated filers from the acceleration of the annual and quarterly reporting deadlines.

Table 1 chronicles the major events and provides the SEC definitions of accelerated and non-accelerated filers. "Accelerated filers" are reporting companies with public float of at least $75 million measured as of the last business day of their most recently completed second fiscal quarter.   Once a firm becomes an "accelerated filer," it remains so classified until it qualifies as a "Small Business Issuer." These "non-accelerated filer" definitions remained in effect during our event period through the end of 2005.

[Insert Table 1 here]

2.2. Deferment of Section 404 compliance deadlines

The Sarbanes-Oxley Act, signed into law July 2002, directed the SEC to develop rules to implement Section 404 regarding internal controls. The first SEC proposal required all public firms to comply with Section 404 for fiscal years ending on or after September 15, 2003. Based on public comments, on May 27, 2003 the SEC deferred accelerated filers' compliance with Section 404 to fiscal years ending on or after June 15, 2004 and for non-accelerated filers to fiscal years ending on or after April 15, 2005. (Release No. 33-8238).

Neither Section 404 of SOX nor the SEC ruling in September 2003 contained procedural guidance for implementing Section 404. In March 2004, the Public Company Accounting Oversight Board (PCAOB) issued Audit Standard No. 2 (AS2) that provided rules for external auditors to evaluate the effectiveness of internal controls. With no specific Section 404 implementation rules for management, AS2 also became the *de facto* guide to managers.

The initial lack of implementation guidance prompted the SEC to further extend Section 404 compliance deadlines on February 24, 2004 for both accelerated filers (to fiscal years ending on or after November 15, 2004) and non-accelerated filers (to fiscal years ending on or after July 15, 2005). Accelerated filers began complying with Section 404 in 2004. The deadline for non-accelerated filers was further extended – on March 2, 2005 to fiscal years ending on or after July 15, 2006, and on September 21, 2005 to fiscal years ending on or after July 15, 2007. Finally, on August 9, 2006, the SEC proposed extending non-accelerated filers' Section 404 compliance to the first annual report for fiscal years ending on or after December 15, 2007. Furthermore, non-accelerated filers need only complete the management's assessment of the internal controls in their first year of compliance with the requirements. Auditor's attestation of the non-accelerated client's internal control report would follow in the next fiscal year (Release No. 33-8731).

In the various extensions to the compliance date for Section 404, the SEC justified its decisions by arguing it was to "reduce the first year cost of compliance" and "make implementation of the internal control over financial reporting requirements more effective" (Release Nos. 33-8730A and 34-54294A).

3. Hypothesis development

SOX Section 404 appears to impose relatively higher costs on small firms than large firms. Widely cited statistics from the American Electronics Association suggest that while

Section 404 costs the average multibillion-dollar company about 0.5% of revenue, the figure can approach 3% for small companies. The first year implementation of Section 404 led to a shortage of audit expertise. Eldridge and Kealey (2005) document that audit fees as a percentage of total assets more than doubled since the enactment of SOX, and small companies reported larger increases.

The indirect costs of Section 404 for small companies, while harder to quantify, are probably also significant. Small firms have more Section 404 implementation problems because they tend to have less well-defined internal control processes and less clear segregation of duties (Ashbaugh, et al., 2007 and Doyle, et al., 2007). The Advisory Committee on Small Public Companies (2006) argues that the result of Section 404 is "a cost/benefit equation that, many believe, diminishes shareholder value…"

Mindful of these concerns, the SEC repeatedly extended Section 404 compliance deadlines for non-accelerated filers (see Section 2). Zhang (2007) and Iliev (2007) report that non-accelerated filers receiving additional time to comply with Section 404 experienced statistically significant positive abnormal stock returns at the announcements of the various extensions. One interpretation of this evidence is that stockholders view complying with Section 404 as on net costly and the deferment as share-value enhancing for small companies. Supporting this interpretation, Iliev (2007) documents that small Section 404 complying firms saw their audit fees double and their shareholder value fall in the first year of Section 404 compliance.

Some managers likely viewed their non-accelerated filer status, and thereby deferring Section 404 compliance, as firm-value increasing.[12] Deferring Section 404 was valuable to these firms because it lowered the present value of their compliance costs. Early Section 404 compliers incurred high start up costs as the mechanics of Section 404 evolved and a temporary shortage of Section 404 knowledgeable auditors drove audit fees higher. In addition to these potential cost savings from compliance deferment, some non-accelerated filers might have held the expectation that they would eventually be exempted from Section 404 requirements or a less onerous set of rules might be devised for small filers. Finally, future non-SOX securities regulation might exempt non-accelerated filers, and hence generate additional benefits of remaining below the $75 million threshold. Having defined the "accelerated" / "non-accelerated" dichotomy, there was at least the possibility that future securities rules might again exempt or defer onerous provisions. This is precisely one of the key recommendations made by the Advisory Committee on Small Public Companies (2006).

Besides wishing to maximize shareholder value, managers of non-accelerated filers may seek to avoid Section 404 compliance to protect their private control benefits. Presumably an effective internal control system erodes managers' private control benefits. This agency problem explanation and the shareholder value maximization explanation are not mutually exclusive. Empirically, we do not differentiate between the two due to the lack of a well developed theory of corporate governance and corresponding reliable empirical proxies (Larcker et al., 2007).

Under both explanations, we expect managers of non-accelerated filers to incur costs to keep their public float below $75 million if those costs are lower than the net costs from Section

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[12] Non-accelerated filers also avoid the potential costs associated with the acceleration of 10-K and 10-Q filing deadlines. The SEC recognizes that while investors in smaller companies value timely disclosures, these companies "may not have the resources or infrastructure to prepare their reports on a shorter timeframe without undue burden or expense." (SEC Release No. 33-8089).

404 compliance and from other future regulations that exempt non-accelerated filers. A variety of actions exist to keep their public float below the threshold. Since a firm's public float is determined by its share price as well as the number of common shares held by non-affiliates, reducing either lowers public float. For example, foregoing certain positive NPV projects and/or making more dividend payouts to shareholders dampens share price. Furthermore, avoiding secondary equity offerings keeps their public float from rising. In addition, public float can be reduced by the lowering the number of non-affiliated shares. Some of these actions impose direct costs on shareholders (e.g. forgoing certain growth opportunities), while others may not (e.g. paying out more cash dividends).

To form a reference point for analyzing non-accelerated filers, we construct a control sample of accelerated filers with market capitalizations of $150 million or below. While these control firms' public float are reasonably close to $75 million, this threshold holds little relevance to them because they can only exit the accelerated filer status if their revenues and public float fall below $25 million for two consecutive years. To further increase our confidence that the difference between accelerated and non-accelerated filers during our post-SOX event period are not driven by correlated omitted variables, we construct a pre-SOX control period and form pseudo classifications of "accelerated" and "non-accelerated filers" according to the later SEC definitions. If the various actions undertaken by non-accelerated filers are effective, we expect that they should have a greater propensity to remain below the size threshold post-SOX. We therefore predict:

Hypothesis 1: *In the post-SOX period non-accelerated filers are more likely to stay below the $75 million threshold than control firms.*

The following hypothesis describes the specific actions undertaken by non-accelerated filers to stay small:

Hypothesis 2: *In the post-SOX period non-accelerated filers are more likely to:*

> *Hypothesis 2a: reduce their net investment in property, plant, and equipment, intangibles, and acquisitions;*

> *Hypothesis 2b: pay out more cash to shareholders via ordinary and special dividends and share repurchases;*

> *Hypothesis2c: make fewer secondary stock offerings;*

> *Hypothesis 2d: decrease the number of shares held by non-affiliates of the firm.*

Because the testing date for determining the accelerated versus non-accelerated filer status is the last business day of the second fiscal quarter, non-accelerated filers might also engage in activities to exert downward pressure on its stock price prior to the test. One way to achieve this might be through delaying good news and accelerating bad news disclosures prior to the test. A manager might also choose more income-decreasing accounting methods believing that lower earnings reduce the share price. This leads to our next hypothesis:

Hypothesis 3: *In the post-SOX period non-accelerated filers are more likely to:*

> *Hypothesis 3a: disclose more bad news in the second fiscal quarter;*

> *Hypothesis 3b: report lower accounting earnings in the second fiscal quarter.*

Insider selling offers another channel through which a non-accelerated filer can influence its share price prior to the test date. Because small stocks generally have lower liquidity, stock sales by insiders before the test could be an effective way to temporarily depress share prices. However, while insider selling can have a negative impact on share prices, it can also increase the number of shares held by non-affiliates.[13] We conduct tests on whether insiders engage in more selling activities in the second fiscal quarter, but do not provide a specific prediction.

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[13] The net effect on public float is negative if the percentage price impact is larger than the percentage of insider shares sold. Prior studies generally find significant price impact from insider trades, especially for small firms (Seyhun, 1986; Lakonishok and Lee, 2001). Seyhun (1986) reports that insider sales generate significant abnormal

Note that there is a timing dimension to the tests on bad news disclosures (H3a), accounting earnings (H3b) and insider selling. We expect that these actions likely occur in the second fiscal quarter prior to the testing date of the filing status because these actions are geared more toward exerting temporary downward pressure on share prices. In contrast, the actions in H2a - H2d (lower investments, more cash payouts, less equity issuance, and fewer non-affiliated shares) likely have longer lasting effects on public float and we therefore hypothesize that they are more likely to be taken throughout the year by non-accelerated filers post-SOX.

Finally, among non-accelerated filers, the incentive to manage their public float depends on the likelihood they will cross the $75 million threshold and become an accelerated filer. As the firm's public float approaches the threshold, the likelihood of crossing increases and the more likely managers will engage in the various actions predicted in Hypotheses 2 and 3. We therefore make the following prediction.

Hypothesis 4: *In the post-SOX period, non-accelerated filers' propensity to undertake the actions predicted in H2 & H3 increases when their public float is closer to the $75 million threshold.*

Table 2 provides a summary of the above hypotheses and the tables providing the tests. For the hypothesized actions in H2 and H3 we also summarize how they are expected to impact public float – through affecting share prices or the number of non-affiliated shares, or both. Some of the actions (dividend payments, share repurchases and SEOs) can affect stock returns due to signaling effects. However, given the current context, the predictions on any potential signaling effects are ambiguous.

[Insert Table 2 here]

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returns of -1.5% over the 50-day window after the trading date, even though the average number of shares traded by insiders accounts for only a fraction of a percent of the total number of shares outstanding.

4. Methodology

Our sample comprises two time periods. The event period spans June 1, 2003 (following the SEC ruling delaying Section 404 on May 27) to December 31, 2005 (following the SEC relaxing the exit rule for accelerated filers that potentially changes non-accelerated filers' incentives to stay small). A control period is selected as January 1, 1999 to September 1, 2001, which ends before the legislative activities leading to SOX. We start with all firm-years with a second fiscal quarter end that falls within one of the two time periods and with a market value of equity of $150 million or below. Figure 1 displays the timeline of the test and control periods.

Most of our tests are conducted with a firm-year as the unit of observation. Firm-year t is defined as the one-year period from the end of the second fiscal quarter in fiscal year t (time 1 in Figure 2) to the next second fiscal quarter end (time 2). The dependent variables on the specific actions undertaken by non-accelerated filers are measured over firm-year t, consisting of fiscal quarters 3 and 4 of year t and fiscal quarters 1 and 2 of year t+1.

[Insert Figures 1 and 2 here]

We measure our main test variable, non-accelerated filer status, at time 1.   We collect information on a firm's filing status for each year during the event period (when such a distinction is made according to SEC rule) from the firm's 10K report.   Specifically, NA_t equals one if a firm reports its filing status as "non-accelerated" in its 10-K report for that year or if it files a 10KSB, indicating its status as a Small Business Issuer; NA_t equals zero if the firm reports its filing status as "accelerated." We also collect firms' public float information from the same 10-K or 10KSB reports. In the vast majority of the filings, firms disclose their public float measured on the last business day of the second fiscal quarter, which is the public float used to determine the firm's filing status for that fiscal year.

During the control period, the concepts of accelerated and non-accelerated filers have not yet been introduced. We collect public float information from firms' 10-K or 10KSB filings during this period and assign pseudo-identifiers to firms as either accelerated filers or non-accelerated filers according to the later SEC definitions. Specifically, NA_t equals one if a firm's public float is below $75 million and it was below $75 million in all prior years since 1998 (this is to mimic the path dependence in the later SEC ruling), or if the firm files a 10KSB. NA_t equals zero if the firm's public float is $75 million or above in the current year or in any of the previous years since 1998.[14]

Our main data source is COMPUSTAT. Data on stock returns and dividend announcement dates are from CRSP. Information on acquisitions and seasoned equity offerings is from SDC and insider trading information is obtained from Thomson Financial Insider Filing Data. News disclosures are hand collected from the FACTIVA database. As reported in Table 3 Panel A, we exclude foreign firms, financial institutions and firms in regulated industries, as well as firms with market value of common equity above $150 million at the end of the second fiscal quarter in year t (time 1 in Figure 2). For partial year observations (firm-years ending outside the two time period windows), we require a minimum of three months of data within the window for inclusion in our sample. Finally, we remove firm-year observations for which we could not ascertain from EDGAR its filing status or obtain its public float information as of the second fiscal quarter end of fiscal year t (time 1 in Figure 2), as well as firms that are delisted before time 2 in Figure 2. These data requirements lead to a base sample of 6,946 firm-year

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[14] During the control period, the vast majority of our sample disclose public float measured a few days prior to its 10-K filing date. For example, for a 12/31 year-end firm, a public float disclosed in the fiscal year 1999 10-K filing is usually measured around the end of the first quarter in the next fiscal year. Since we are interested in the public float at the end of the second fiscal quarter, in this particular example we use the public float measured around the end of the first fiscal quarter of 2000 to proxy for the firm's public float at the end of the second fiscal quarter of 2000. This imprecise match in timing may introduce noise/bias into our analyses.

observations with 4,282 firm-years (2,547 firms) in the control period and 2,664 firm-years (1,291 firms) in the event period. The market downturn between our two time periods and firms exiting the public capital markets post-SOX (Engel et al., 2007 and Leuz et al., 2007) likely explain the reduction in observations from the control to the event periods. Some subsequent tests impose additional data requirements as detailed in Table 3 Panel B. Finally, non-accelerated filers account for slightly over 70% of the total firm-year observations in both the event and control periods, suggesting that our procedure to assign pseudo-identifiers to firms in the control period reasonably approximates the later SEC definitions of accelerated and non-accelerated filers.

Table 4 reports summary statistics for accelerated filers and non-accelerated filers in the event period (Panel A) and control period (Panel B). Detailed variable definitions are provided in Appendix A. Non-accelerated filers with median public float of $24.8 million and median sales of $40.5 million in the event period ($15.4 million in public float and $34.0 million in sales in the control period) are smaller than accelerated filers, which have median public float of $90.9 million and median sales of $79.5 million in the event period ($80.4 million in public float and $115.5 million in sales in the control period).[15] Table 4 Panel C presents the differences in the variables between non-accelerated filers and accelerated filers in the event and control periods. The last columns in Panel C reflect the differences in the differences between the two time periods. The difference in the differences on $Less75_{t+1}$ is significantly positive, consistent with non-accelerated filers being more likely to stay below the $75 million threshold in the event

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[15] Non-accelerated filers in our sample have a median market value of $38 million in the event period and $24 million in the control period, which are larger than the median public floats, as expected. The correlation between market value and public float for our sample firms is 0.78. We note that our non-accelerated filers are larger than firms going dark, which have median market value of roughly $4 million as reported in Leuz et al. (2007). Therefore, the non-accelerated filers are more likely to benefit from remaining in the public markets relative to firms that voluntarily deregister with the SEC.

period, offering support for H1. The differences are negative and significant for $Chinv_t$, Acq_t and SEO_t, suggesting that relative to the control firms non-accelerated filers have smaller changes in investments, and lower frequencies of acquisitions and SEOs in the event period, supporting H2a and H2c. The differences in differences on $Cashpay_t$ and $Chcashpay_t$ are positive and significant, indicating more cash payouts by non-accelerated filers in the event period than control firms, supporting H2b. Table 5 presents the correlation matrix for our main test variables.

<center>**[Insert Tables 3, 4 and 5 here]**</center>

5. Non-accelerated filers' propensity to stay small

If a non-accelerated filer's ultimate goal is to retain its non-accelerated filing status, the most direct measure of the outcome is their future public float. We predict in H1 that non-accelerated filers are more likely to remain below the $75 million threshold than control firms and estimate the following logistic regression (firm subscripts are omitted in this and all subsequent regression models):

$$prob(Less75_{t+1} = 1) = Logit(\beta_0 + \beta_1 NA_t + \beta_2 Event_t + \beta_3 Event_t NA_t + \sum_j \beta_j Controls) \qquad (1)$$

The dependent variable, $Less75_{t+1}$, is an indicator that equals one if the one-year-ahead public float at time 2 (in Figure 2) is less than $75 million, and zero otherwise. Our independent variables include an indicator variable for non-accelerated filers measured at time 1, NA_t. Reflecting our difference-in-differences test design, we also include an indicator variable $Event_t$, which takes the value of one if year t is post-SOX (June 1, 2003 – December 31, 2005) and zero if year t is pre-SOX (January 1, 1999 to September 1, 2001). The coefficient on NA_t (β_1) captures the difference in the likelihood of staying small between non-accelerated filers and accelerated filers during the control period. The sum of the coefficients on NA_t and $Event_t NA_t$

($\beta_1 + \beta_3$) measures the difference in the likelihood of staying small between non-accelerated filers and accelerated filers during the *event* period. Therefore, the β_3 coefficient on the interactive term *Event$_t$NA$_t$* captures the difference in the differences between the two time periods. We expect that post-SOX non-accelerated filers are more likely to stay below $75 million than control firms and as a result predict a *positive* sign on *Event$_t$NA$_t$*.[16] .

In order to control for the various asset pricing factors, we include as controls returns on the Fama-French three factors (*Mkt_Rf$_t$, SMB$_t$, HML$_t$*), the momentum factor (*MOM$_t$*) and industry returns (*Indret$_t$*) during firm-year t (from time 1 to time 2). Furthermore, in order to allow these risk factors to vary cross sectionally and over time, we multiply each factor return by a firm's beta relative to that factor in each year.[17] We also follow Iliev (2007) and include the linear, squared and cubic terms of public float measured at time 1 to control for any non-linear effects of public float.[18]

Table 6 reports the regression results of model (1). The coefficient on the interactive term, *Event$_t$NA$_t$*, is positive (0.767) as predicted and significant at less than the 1% level. All three Fama-French factors and the market and industry indexes are negative as expected and statistically significant at the 1% level. Following Norton et al. (2004), who call for caution when interpreting interactive terms in logit models, we calculate the corrected marginal effect on our

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[16] Even though H4 posits that larger non-accelerated filers are more likely to *undertake actions* to stay small than smaller non-accelerated filers, given their larger public float large non-accelerated filers' likelihood of staying below the threshold may not differ from those of smaller non-accelerated filers. Accordingly, model (1) does not investigate the differences between large and small non-accelerated filers.

[17] For example, if the excess market return is 10% for year t, for a firm with a market beta of 1.1 in that year, *Mkt_Rf$_t$* is 11%. The beta for firm-year t is the average of the beta estimates for the 12 months during that year. In order to allow the loadings on the five factors to vary across time and across firms, for each firm-month we use the prior 24 and the subsequent 24 monthly returns, while requiring at least 12 non-missing monthly returns, to estimate the factor loadings. Industry effects are measured based on the Fama-French 48 industry classifications. The information on the factor returns are obtained from Kenneth French's website at:
http://mba.tuck.dartmouth.edu/pages/faculty/ken.french/data_library.html.

[18] The cubic term is significant only in model (1). We exclude the cubic term from all subsequent regressions. Including this term in all regressions does not affect our inferences.

main interactive test variables in all logit models and report the results in Table 10.[19] The

corrected marginal effect (Table 10) on $Event_t NA_t$ is 8.5%, significant at less than the 1% level.

The unconditional probability of staying below $75 million for our sample firms is 77%. The

evidence therefore supports H1 and is consistent with our prediction that post-SOX non-

accelerated filers take actions that allow these firms to remain small.[20]

[Insert Table 6 here]

6. Actions undertaken by non-accelerated filers to stay small

H2 and H3 predict various actions undertaken by non-accelerated filers to stay small.

This section presents the related evidence. In particular, we analyze non-accelerated filers'

decisions regarding their net investments (Section 6.1), dividend payments and share repurchases

(Section 6.2), seasoned equity offerings (Section 6.3), and non-affiliated shares (Section 6.4).

We also investigate their news disclosures (Section 6.5), reported earnings (Section 6.6) and

insider selling (Section 6.7) in the second fiscal quarter relative to control firms.

In order to isolate the effect of SOX and remove the potential impact from other factors

on the dependent variables, we model each dependent variable as the residual from a prediction

model. For example, we use the change in investment, change in cash payouts, change in non-

affiliated shares, and change in earnings as dependent variables assuming that the expected levels

of investment, cash payouts, non-affiliated shares, and earnings are the same as those from the

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[19] Due to the nonlinear nature of a logit model, both the sign and the statistical significance of the coefficient on an interacted term may differ from the true marginal effect from the changes in the interacted variables.
[20] We calculate abnormal returns for accelerated filers and non-accelerated filers post-SOX, where abnormal returns are measured excluding dividends and after adjustments for the Fama-French three factors (Fama and French, 1993), the momentum factor and the industry effect. We find that during our event period, accelerated filers on average experience significantly negative quarterly returns of -1%, while the non-accelerated filers have significantly positive quarterly returns of 2.2%. This is consistent with Iliev (2007)'s evidence that Section 404 compliance costs have adversely affected accelerated filers' stock returns. We find larger non-accelerated filers (public float in excess of $45 million) experience insignificant abnormal returns post-SOX, which is significantly lower than the 2.4% quarterly abnormal returns by smaller non-accelerated filers (public float below $45 million). This is consistent with larger non-accelerated filers being more likely to engage in actions to stay below the threshold.

previous period. We estimate residual insider trading from the prediction model in Cheng and Lo (2006) and use it as the dependent variable in our insider trading analysis. For the analyses of acquisitions and seasoned equity offerings, we use the levels, not the changes, as the dependent variables because these events are relatively infrequent; although we do include control variables that likely influence firms' investing and financing decisions.

6.1. Net investments

In this section we test H2a that post-SOX non-accelerated filers undertake less investment to stay small. We estimate the following OLS regression model:

$$Chinv_t = \beta_0 + \beta_1 NA_t + \beta_2 NALrg_t + \beta_3 Event_t + \beta_4 Event_t NA_t + \beta_5 Event_t NALrg_t + \sum_j \beta_j Controls \tag{2}$$

The dependent variable $Chinv_t$ measures the change in investment over firm-year t (one year between time 1 and time 2 in Figure 2) deflated by lagged total assets. Investment is defined as the sum of annual capital expenditures, R&D, advertising expense, minus the sale of PP&E.

Since firms can also invest through acquisitions, we separately model acquisitions with the following logit model:

$$prob\,(Acq_t = 1) = Logit\,(\beta_0 + \beta_1 NA_t + \beta_2 NALrg_t + \beta_3 Event_t + \beta_4 Event_t NA_t + \beta_5 Event_t NALrg_t + \sum_j \beta_j Controls\,) \tag{2'}$$

The dependent variable Acq_t is an indicator that is one if the firm has any acquisition activity in firm-year t, and zero otherwise. The right hand side variables include NA_t, $Event_t$ and their interactive term $Event_t NA_t$. Since H4 predicts that non-accelerated filers' incentives to undertake actions to stay small are stronger when they are close to the $75 million threshold, we also include an indicator variable for larger non-accelerated filers, $NALrg_t$, which is equal to one if a firm's public float at time 1 is at least $45 million and zero otherwise. The coefficient on

NA_t (β_1) captures the difference in the change in investment between *small* non-accelerated filers and accelerated filers during the control period, and the coefficient on $NALrg_t$ (β_2) measures the difference between *large* non-accelerated filers and *small* non-accelerated filers in the control period. The sum of the coefficients on NA_t and $Event_tNA_t$ $(\beta_1 + \beta_4)$ measures the difference in the change in investment between *small* non-accelerated filers and accelerated filers during the *event* period. Therefore, the β_4 coefficient on the interactive term $Event_tNA_t$ captures the difference in the differences between the two time periods. Similarly, the β_5 coefficient on the interactive term $Event_tNALrg_t$ captures the difference in the differences between the two time periods.

Models (2) and (2') above and the subsequent models on cash payouts, seasoned equity offers and non-affiliated shares share a number of control variables. We include lagged information on *ROA*, market-to-book ratio (*MB*), *Sales*, free cash flows (*FCF*), *leverage*, an indicator for older firms (*Older*), and stock return standard deviation (*Stdret*) because these characteristics are likely related to investment, payout, financing and ownership decisions.[21] We also include the linear and squared terms of public float measured at time 1 to control for any non-linear effects of public float.

H2a predicts that post-SOX non-accelerated filers have *lower* rates of investment compared to control firms. Therefore, the coefficient on the interactive term $Event_tNA_t$ is predicted to be *negative*. H4 further predicts non-accelerated filers' incentives to undertake actions in order to stay small are stronger when they are closer to the $75 million threshold. Therefore, the coefficient on the interactive term $Event_tNALrg_t$ is also predicted to be *negative*.

---

[21] Our definition of free cash flows follows Blouin et al. (2004). We use nine years as the cutoff for defining older firms following Grullon and Michaely (2002). In order to reduce the influence from extreme observations, we include in the regressions decile ranks for ROA, market-to-book ratio, sales, free cash flows and leverage.

The regression results of model (2) on changes in investments are reported in Table 7 column (1). The coefficient on $Event_tNA_t$ is insignificant. However, the coefficient on $Event_tNALrg_t$ is negative (-0.033) and significant at the 1% level. This suggests that post-SOX larger non-accelerated filers reduce investment by 3.3% of total assets relative to smaller non-accelerated filers, who in turn show no significant difference from the accelerated filers (the mean change in investments is -0.1% of total assets for our sample firms). These results support H4 (post-SOX, the non-accelerated filers at the greatest risk of crossing the threshold are the most aggressive in reducing their investments to stay small). In un-tabulated analysis, we remove $NALrg_t$ and $Event_tNALrg_t$ from the right hand side of the regression and find a significant negative coefficient on $Event_tNA_t$, suggesting non-accelerated filers *as a group* also have lower investments than accelerated filers in the event period, supporting H2a. Regarding the control variables, we find that firms with higher *ROA*, more growth options (*MB)*, and those that are older have larger changes in investments. Larger firms (measured by *Sales*) have smaller changes in investments as a percentage of total assets. The coefficient on lagged change in investment is negative and significant, suggesting a partially mean-reverting process in investment.

[Insert Table 7 here]

The regression results from model (2') on acquisitions are reported in Table 7, column (2). The coefficient on $Event_tNA_t$ is negative (-0.256) and marginally significant at the 10% level, supporting H2a. The coefficient on $Event_tNALrg_t$ is insignificant. The corrected marginal effect on $Event_tNA_t$ (Table 10) is -2.2%, marginally significant at the 10% level. This suggests that the probability of acquisitions by the smaller non-accelerated filers post-SOX is 2.2% lower relative to accelerated filers (the unconditional probability of acquisitions for our sample firms is

9.8%). Taken together, the evidence in columns (1) and (2) in Table 7 is consistent with our predictions that post-SOX non-accelerated filers reduce investment relative to accelerated filers in order to remain small.

6.2. Cash dividends and share repurchases

In this section we test H2b that post-SOX non-accelerated filers pay out more cash to shareholders via regular and special dividends and share repurchases. We estimate the following two logistic models.

$$
\begin{aligned}
prob\,(Cashpay_{t} = 1) = Logit\,(\beta_{0} + \beta_{1}NA_{t} + \beta_{2}NALrg_{t} + \beta_{3}Event_{t} + \beta_{4}Event_{t}NA_{t} \\
+ \beta_{5}Event_{t}NALrg_{t} + \sum_{j}\beta_{j}Controls\,)
\end{aligned}
\tag{3}
$$

$$
\begin{aligned}
prob\,(Chcashpay_{t} = 1) = Logit\,(\beta_{0} + \beta_{1}NA_{t} + \beta_{2}NALrg_{t} + \beta_{3}Event_{t} + \beta_{4}Event_{t}NA_{t} \\
+ \beta_{5}Event_{t}NALrg_{t} + \sum_{j}\beta_{j}Controls\,)
\end{aligned}
\tag{3'}
$$

The dependent variable in model (3) *Cashpay$_t$* is one if the firm makes any cash payout (regular or special dividend, or share repurchases) during firm-year t (the one year period from time 1 to time 2 in Figure 2), and zero otherwise. Model (3') analyzes the *change* in cash payout to shareholders, where *Chcashpay$_t$* is one if the sum of all cash payouts to shareholders in firm year t is larger than in the previous firm-year, and zero otherwise. The independent variables in the two models are the same as those in the investment models.

H2b predicts that post-SOX non-accelerated filers make *more* cash payouts relative to control firms. We analyze both the occurrence of cash payouts (model 3) and the frequency of cash payout increases (model 3') and expect the coefficient on *Event$_t$NA$_t$* to be *positive* in both models. Furthermore, H4 predicts non-accelerated filers' incentives to undertake actions in order to stay small strengthen when they are closer to the $75 million threshold. Thus, we expect *positive* coefficients on *Event$_t$NALrg$_t$*.

The results for model (3) on *Cashpay_t* are reported in column (3) Table 7. Consistent with H2b, the coefficient on *Event_tNA_t* is positive (0.425) and marginally significant at the 10% level. The coefficient on *Event_tNALrg_t* is also positive (0.731) and significant at the 5% level, supporting H4. The corrected marginal effect on *Event_tNA_t* (Table 10) is 1.9%, significant at the 5% level. This suggests that the probability of cash payouts by smaller non-accelerated filers post-SOX is 1.9% higher relative to accelerated filers (the unconditional probability of cash payouts for our sample firms is 9.8%). The corrected marginal effect on *Event_tNALrg_t* is 3.2% and significant at the 5% level. This indicates that the probability of cash payouts by larger non-accelerated filers post-SOX is an additional 3.2% higher than smaller non-accelerated filers.

The results in column (4) of Table 7 on *Chcashpay_t* produce overall similar inferences as those from column (3). The coefficient on *Event_tNALrg_t* is positive (0.716) and significant at the 5% level, supporting H4. The coefficient on *Event_tNA_t* is insignificant. The corrected marginal effect (Table 10) on *Event_tNALrg_t* suggests that the probability of an increase in cash payouts by larger non-accelerated filers post-SOX is 3.7% higher relative to smaller non-accelerated filers (the unconditional probability of an increase in cash payouts for our sample firms is 6.6%).

The results on the control variables in columns (3) and (4) suggest that firms with better accounting performance, more free cash flows and older firms are more likely to make cash payouts to shareholders. On the other hand, more growth opportunities, higher leverage, and more volatile stock returns are associated with a lower likelihood of cash payouts. The significant and positive coefficient on the lagged dependent variables is consistent with the stickiness in dividend payouts (e.g. Lintner, 1956). One factor that likely impacts corporate payout decisions during our event period is the Jobs and Growth Tax Relief Reconciliation Act of 2003, which reduces the maximum statutory personal tax rate on dividends from 38.1% to

15%. Prior studies find that the Act leads to larger corporate payouts since 2003 (e.g. Chetty and Saez, 2004, and Blouin et al., 2004). However, the dividend tax cut is unlikely to explain our results because we benchmark non-accelerated filers in each time period against accelerated filers and there is no *ex ante* reason to expect that they should react differently to the tax cut.

6.3. Seasoned equity offerings

H2c predicts that post-SOX non-accelerated filers make fewer secondary equity offerings in order to stay small. We test this hypothesis using the following logistic regression model:

$$prob\,(SEO_t = 1) = Logit\,(\beta_0 + \beta_1 NA_t + \beta_2 NALrg_t + \beta_3 Event_t + \beta_4 Event_t NA_t$$
$$+\, \beta_5 Event_t NALrg_t + \sum_j \beta_j Controls\,) \tag{4}$$

The dependent variable SEO_t is an indicator that is one if the firm makes a seasoned equity offering in year t (the one year period between time 1 and time 2 in Figure 2). The independent variables are the same as those in the previous models. H2c predicts that post-SOX non-accelerated filers *are less likely* to have seasoned equity offerings relative to control firms. Therefore, we predict a *negative* coefficient on the interactive term $Event_t NA_t$. Furthermore, H4 predicts non-accelerated filers' incentives to undertake actions in order to stay small strengthen as they approach the $75 million threshold. We expect a *negative* coefficient on $Event_t NALrg_t$.

Column (5) Table 7 reports the results of estimating model (4). Neither $Event_t NA_t$ nor $Event_t NALrg_t$ are statistically different from zero. Therefore, even though there is univariate evidence supporting H2c (Table 4), the results do not hold in a multivariate regression setting. One possible reason for the lack of significant findings on $Event_t NA_t$ and $Event_t NALrg_t$ involves low power of our tests due to SDC's incomplete coverage of share issuance events (Pontiff and Woodgate, 2008), which are likely more severe for small firms.

6.4. Non-affiliated shares

In this section we test H2d that post-SOX non-accelerated filers decrease the number of non-affiliated shares. We estimate the following OLS regression model:

$$\Delta \ln(NonAffl_t) = \beta_0 + \beta_1 NA_t + \beta_2 NALrg_t + \beta_3 Event_t + \beta_4 Event_t NA_t + \beta_5 Event_t NALrg_t$$
$$+ \sum_j \beta_j Controls \tag{5}$$

The dependent variable $\Delta \ln(NonAffl_t)$ measures the change in the natural log of the number of non-affiliated shares over firm-year t (one year period between time 1 and time 2 in Figure 2). Non-affiliated shares are measured by dividing the disclosed public float by the firm's closing stock price on the public float measurement date.[22] The independent variables are the same as those in the previous models.

H2d predicts that post-SOX non-accelerated filers have *smaller* (more negative or less positive) changes in non-affiliated shares compared to control firms. Therefore, the coefficient on the interactive term $Event_t NA_t$ in model (1) is predicted to be *negative*. H4 further predicts non-accelerated filers' incentives to undertake actions in order to stay small are stronger when they are closer to the $75 million threshold. Therefore, the coefficient on the interactive term $Event_t NALrg_t$, is also predicted to be *negative*.

The regression results of model (5) are reported in Table 8. The point estimate on the coefficient, $Event_t NA_t$, is negative but insignificant. The coefficient on $Event_t NALrg_t$ is negative (-0.043) and significant at the 5% level. This suggest that post-SOX large non-accelerated filers reduce their number of non-affiliated shares by about 4% relative to smaller non-accelerated filers, supporting H4 that non-accelerated firms closer to the size threshold are more aggressive

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[22] Stock prices are adjusted for stock splits. We exclude firms with multiple classes of common shares from this part of the analysis due to complications caused by different prices for different classes of shares. Eighteen firm-year observations are excluded as a result.

at taking actions to stay small.[23] Regarding the control variables, we find that firms with higher growth, higher leverage and more volatile returns have larger increases in the number of non-affiliated shares. On the other hand, profitability, firm size (measured by sales), free cash flows and firm age are negatively associated with changes in non-affiliated shares. The coefficient on lagged changes in non-affiliated shares is negative and significant, suggesting a partially mean-reverting process.

[Insert Table 8 here]

6.5. News disclosures

In Sections 6.1 to 6.4, we document post-SOX non-accelerated filers' change their investment and payout decisions and non-affiliated shares in order to stay small. In addition to the actions documented in the previous sections, which likely permanently reduce firm public float, non-accelerated filers can also engage in activities that exert temporary downward pressure on its share price before the filing status testing date at the end of the second fiscal quarter. H3a hypothesizes that one way to achieve this end is through more bad news disclosure during the second fiscal quarter. We collect company press releases from the FACTIVA database. In order to keep the data collection process manageable, we focus on the second and third fiscal quarters and on firms with market values in the range of $30 million to $120 million to limit the sample to those firms for which the $75 million threshold is most relevant. We randomly select 50 firm-quarter observations under these restrictions in each of the four groups: non-accelerated filers in

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[23] Large non-accelerated filers can reduce the number of non-affiliated shares through various means. For example, the reduction can be due to the lower overall numbers of common shares outstanding, achieved through share repurchases. Such events are rare in our sample (occurring in 42 out of the 6,946 firm-years); however, this can be due in part to SDC's incomplete coverage of these transactions (Pontiff and Woodgate, 2008). In un-tabulated results, we find that post-SOX large non-accelerated filers reduce their total shares outstanding relative to small non-accelerated filers. The reduction in non-affiliated shares can also come from increases in affiliated shares. Again, in un-tabulated results, we find that the change in non-affiliated shares and the change in affiliated shares are negatively correlated in our sample (Pearson correlation of -0.19), and such negative correlations are especially strong for non-accelerated filers in the event period.

the event and control periods and accelerated filers in the event and control periods. This results

in 200 firm-quarter observations. For each firm-quarter, we then download all company press

releases from FACTIVA. For each news disclosure, we classify it as good news, bad news, or

neutral news, based on the headline. (The news classification scheme is reported in Appendix

B.) We calculate the proportion of bad news relative to the sum of good and bad news for each

quarter ($Badnews_q$) and estimate the following regression model:

$$Badnews_q = \beta_0 + \beta_1 NA_t + \beta_2 Event_t + \beta_3 Event_t NA_t + \beta_4 2ndqtr_q + \beta_5 2ndqtr_q NA_t$$
$$+ \beta_6 2ndqtr_q Event_t + \beta_7 2ndqtr_q Event_t NA_t + \sum_j \beta_j Controls \qquad (6)$$

Similar to earlier regression models, we also include the linear and squared terms of

public float measured at time 1 in Figure 2 as control variables. Twenty five out of the 200

observations are lost due to missing public float information, resulting in 175 observations used

in the regression. Since H3a predicts that post-SOX non-accelerated filers make *more* bad news

disclosures in the second fiscal quarter, we focus on $2ndqtr_q Event_t NA_t$. The coefficient on this

variable is predicted to be *positive* in model (5). The regression results are presented in column

(1) of Table 9 Panel A. We find that $2ndqtr_q Event_t NA_t$ has a positive coefficient (0.289) and is

significant at the 5% level. This is the only statistically significant coefficient in the model

(except the intercept) and is consistent with H3a. Post-SOX non-accelerated filers make 28.9%

more bad news disclosures in the second fiscal quarter relative to control firms (the mean

percentage of bad news disclosures for our sample firms is 22.2%). In un-tabulated regressions

of news disclosures and accounting earnings and insider trading (in the next two sections), we

also include in the regression models $NALrg_t$, $Event_t NALrg_t$, and $2ndqtr_q Event_t NALrg_t$. The

coefficient on $2ndqtr_q Event_t NALrg_t$ is insignificant in these regressions and the

inclusion/exclusion of the *NALrg_t*-related terms does not affect our inferences on the other variables. For brevity, these variables are excluded from the regressions reported in Table 9.

[Insert Table 9 here]

6.6. Reported accounting earnings

H3b predicts that non-accelerated filers exert downward pressure on their share prices post-SOX by reporting lower earnings in the second fiscal quarter before the filing status testing date. The following regression tests this prediction:

$$prob(Pst\_UE_q = 1) = Logit(\beta_0 + \beta_1 NA_t + \beta_2 Event_t + \beta_3 Event_t NA_t + \beta_4 2ndqtr_q$$
$$+ \beta_5 2ndqtr_q NA_t + \beta_6 2ndqtr_q Event_t + \beta_7 2ndqtr_q Event_t NA_t + \sum_j \beta_j Controls) \quad (7)$$

The dependent variable in model (7), *Pst_UE_q*, is one for positive unexpected earnings in quarter *q* (*UE_q*), defined as the quarter q earnings-per-share (*EPS*) minus the *EPS* from the same quarter last year, and zero otherwise. The independent variables are the same as those in the previous section's news disclosure model. Our focus similarly is on the variable *2ndqtr_qEvent_tNA_t*. The coefficient on this variable is predicted to be *negative* in the model according to H3b.

Table 9 Panel A column (2) provides the estimation results. The interactive term *2ndqtr_qEvent_tNA_t* has a negative coefficient, -0.226, and is marginally significant at the 10% level. The corrected marginal effect on *2ndqtr_qEvent_tNA_t* (Table 10) suggests that the probability of an earnings increase by non-accelerated filers post-SOX is 5.4% lower relative to control firms (the unconditional probability of an earnings increase for our sample firms is 50.6%). The

results therefore support H3b (post-SOX non-accelerated filers are more likely to report lower accounting earnings in the second fiscal quarter).[24]

If managers exploit their accounting discretion to report lower earnings in the second fiscal quarter, we expect to observe a larger than usual increase in the third quarter earnings due to the reversal of accruals. In un-tabulated results, we find evidence consistent with this prediction. Specifically, we regress earnings changes from quarter q-1 to quarter q on $Event_t$, NA_t, $Event_tNA_t$, and the interactive terms of these variables with a dummy variable for the third fiscal quarter (indicating earnings change from the second to the third quarter). As expected, the coefficient on $3rdqtr_qEvent_tNA_t$ is positive and significant at less than the 5% level. This suggests that post-SOX non-accelerated filers have larger than usual earnings increases in the third fiscal quarter, consistent with the lower earnings in the second fiscal quarter reversing in the subsequent quarter.

6.7. Insider selling

Our discussion in Section 3 raises the possibility that non-accelerated filers may exert downward pressure on their share prices post-SOX by engaging in more insider selling in the second fiscal quarter before the filing status testing date, although we do not offer a formal prediction because insider selling can also increase the number of non-affiliated shares leading to ambiguous predictions for the change in public float.[25] In this section, we investigate insider trading behavior in the second fiscal quarter using the following regression:

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[24] The second fiscal quarter earnings announcement likely occurs during the next fiscal quarter and after the filing status testing date. However, researchers have long documented that price leads earnings (Beaver et al., 1980 and Kothari and Sloan, 1992), which suggests a substantial portion of the price impact from lower earnings in the second fiscal quarter likely occurs prior to the quarter end.

[25] The SEC defines corporate insiders as company officers and directors, and any beneficial owners of more than ten percent of a class of the company's equity securities. Although the concepts of "insiders" and "affiliates" (see footnote #4) overlap, they are not equivalent to each other.

$$Netpercent\_r_q = \beta_0 + \beta_1 NA_t + \beta_2 Event_t + \beta_3 Event_t NA_t + \beta_4 2ndqtr_q$$
$$+ \beta_5 2ndqtr_q NA_t + \beta_6 2ndqtr_q Event_t + \beta_7 2ndqtr_q Event_t NA_t + \sum_j \beta_j Controls \qquad (8)$$

The dependent variable *Netpercent_r$_t$* is the residual from a prediction model of insider trading following Cheng and Lo (2006). *Netpercent* is defined as (buy-sell)/(buy+sell), where "buy" is the sum of all shares that insiders buy over a fiscal quarter and "sell" is the sum of all shares that insiders sell over a fiscal quarter. The estimated Cheng and Lo (2006) model is presented in Table 9 Panel B. The independent variables in the model include options granted, the firm's stock and accounting returns, firm size, market-to-book ratio, and the lagged dependent variable.

The regression estimation results are presented in column (3) of Table 9 Panel A. We find that *2ndqtr$_q$Event$_t$NA$_t$* has a negative coefficient (-0.105) and is significant at the 5% level. This suggests that post-SOX non-accelerated filers purchase 10.5% less shares in the second fiscal quarter (the mean insider net purchase for our sample firms is 14.3%). In un-tabulated results, most of the effects we observe in column (3) are from more insider selling (versus less insider purchases) in Q2. Our results therefore contradict those in Nondorf et al. (2007). They find more insider buying/less insider selling in the second fiscal quarter for their "threshold" firms relative to control firms. However, as discussed earlier, their "threshold" firms include both accelerated and non-accelerated filers, making their findings difficult to interpret.

[Insert Table 10 here]

7. Conclusions

We document an unintended consequence of the Sarbanes-Oxley Act of 2002 (SOX), and its subsequent implementation. In particular, we find that this regulation created incentives for firms to remain small. The SEC has on various occasions from 2003 – 2006 postponed

compliance with Section 404 of SOX for "non-accelerated filers" (firms with public floats less than $75 million). We find that these firms are more likely to remain below this bright line threshold. Moreover, we document that compared to control firms, non-accelerated filers remain small by undertaking less investment, making more cash payouts through dividends and share repurchases, and reducing the number of non-affiliated shares (shares used to compute public float), and by releasing more bad news disclosures, reporting lower earnings, and engaging in more insider selling in the second fiscal quarter than control firms.

Our findings provide evidence on the economic consequences of exempting small companies from regulations or postponing compliance deadlines for these firms. This has implications beyond SOX. Regulations granting small firms exemptions date back to the initial federal securities laws of the 1930s. Moreover, the SEC is considering exempting small filers from a variety of regulations regarding capital formation, corporate governance, disclosure, and financial reporting. Other government regulations such as OSHA, EPA, the Small Business Administration, and the enforcement of antitrust contain implicit and explicit firm size tests and hence generate similar incentives.

Our evidence suggests that when regulations entail large costs for small businesses, one of the unintended consequences of these exemptions is that some firms have incentives to remain below the bright line thresholds. While this result is consistent with firms having incentives to avoid costly regulation, it does not address the broader question of whether exempting small firms from regulation is socially beneficial.

We also document a heretofore unrecognized consequence of SOX – namely the efforts by non-accelerated filers to keep their public float below $75 million. Prior studies suggest SOX

alters a firm's cost-benefit tradeoff of participating in U.S. public capital markets. Our results indicate that for firms that do remain public, SOX can also alter their incentives to grow.

Finally, we provide additional evidence on the economic consequences of SOX particularly, Section 404 on internal controls, for small public companies. Our findings add to the previous literature and are consistent with the view that Section 404 imposes costs on small businesses. However, whether managers of non-accelerated filers wishing to remain below the $75 million threshold did so because they viewed this decision as maximizing shareholder value and/or because they wished to maintain their private control benefits awaits future research.

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Appendix A: Variable definitions

A. Dependent variables

Test on the likelihood of staying small

$Less75_{t+1}$	Indicator variable that equals one if a firm's public float at the end of firm-year t (time 2 in Figure 2) is less than 75 million, and zero otherwise.

Change in investment

$Chinv_t$	The change in investment between firm-year t and t-1. Investment is measured by annual capital expenditure (COMPUSTAT data128) + R&D expenditure (data46) + Advertising expenses (data45) - Sale of PP&E (data107). The change in investment is then deflated by lagged total assets.

Acquisition

Acq_t	Equals one if a firm has any acquisition activity in firm-year t, and zero otherwise.

Cash payout

$Cashpay_t$	Equals one if there is any types of cash payout to shareholders in firm-year t (regular dividend and special dividends, and share repurchases), and zero otherwise.
$Chcashpay_t$	Equals one if the sum of all three types of cash payout (regular dividend, special dividend and share repurchases) in firm-year t is larger than the previous year, and zero otherwise.

SEO

SEO_t	The variable SEO is equal to one if there is any seasoned equity offerings in a firm-year t, and zero otherwise.

Change in non-affiliated shares

$\Delta \ln(NonAffl_t)$	The change in the natural log of non-affiliated shares from time 1 to time 2 (Figure 2). The number of non-affiliated shares (in millions) is the disclosed public float divided by the closing price on the public float measurement date.

News disclosure

$Badnews_q$	Equals bad news/(good news + bad news), where good (bad) news is the number of good (bad) news disclosures for a quarter.

Quarterly earnings

Pst_UE_q	An indicator variable equal to one if UE_q is positive and zero otherwise. UE_q, the unexpected earnings per share in quarter q is calculated as earnings per share for fiscal quarter q minus earnings per share from the same quarter last year, i.e. $EPS_q - EPS_{q-4}$. Earnings per share comes from data19 in COMPUSTAT quarterly file.

Insider trading

Netpercent_r_q	The residual net insider purchases in quarter q from the insider trading prediction model in Cheng and Lo (2006). *Netpercent_q* equals (buy-sell)/(buy+sell), where the variable buy is the sum of all shares that insiders "buy" over a fiscal quarter, and the variable "sell" is the sum of all shares that insiders sell over a fiscal quarter.

B. Main test variables

NA_t	An indicator variable for non-accelerated filers at time 1 (Figure 2). For event years, NA_t equals one if a firm's filing status from 10K for fiscal year *t* is non-accelerated or if a firm files 10-KSB as a Small Business Issuer, and zero otherwise. For control years, NA_t equals one if the public float is less than $75 million at time 1 in firm-year t and at all the previous second fiscal quarter ends in the sample period, or if a firm files 10-KSB as a Small Business Issuer, and zero otherwise.
$NALrg_t$	An indicator variable for large non-accelerated filers at time 1 (Figure 2). It equals one if a firm is classified as non-accelerated filer (NA_t=1) and its public float is at least $45 million, and zero otherwise.
$Event_t$	Indicator variable that equals one if an observation belongs to the event period, and zero for control period.
$2ndqtr_q$	Indicator variable that equals one for the second fiscal quarter, and zero otherwise.

C. Control variables

Test on the likelihood of staying small

Factor betas are estimated with the Fama-French three factors, the momentum factor and the industry effect. The beta for firm-year t is the average of the beta estimates for the 12 months during that year. To calculate the factor betas for each firm-month, we use the prior 24 and the subsequent 24 monthly returns, while requiring at least 12 non-missing monthly returns for the estimations.

Mkt_Rf_t	The product of the firm's average monthly loadings on the excess market return and the excess market returns over firm-year *t*.
SMB_t	The product of the firm's average monthly loadings on the size factor and the return on the size factor over firm-year *t*.
HML_t	The product of the firm's average monthly loadings on the market-to-book factor and the return on the market-to-book

factor over firm-year *t*.

MOM$_t$	The product of the firm's average monthly loadings on the momentum factor and the return on the momentum factor over firm-year *t*.
Indret$_t$	The product of the firm's average monthly loadings on the Fama-French 48 industry factor and the return on the industry factor over firm-year *t*.

Tests on Investment, Acquisition, Cash payout, SEO, and unaffiliated shares,

ROA$_{t-1}$	The decile rank of return on assets as of the beginning of fiscal year *t*. The return on assets is defined as operating income before depreciation (data13)/ total assets (data6).
MB$_{t-1}$	The decile rank of market-to-book ratios as of the beginning of fiscal year *t*. Market-to-book is measured as common shares outstanding (data25)*closing price (data199)/ common equity (data6).
Sales$_{t-1}$	The decile rank of total sales (data12) at the beginning of the fiscal year *t*.
FCF$_{t-1}$	The decile rank of total asset-deflated free cash flow for a firm as of the beginning of fiscal year *t*. Free cash flow is calculated as cash and marketable securities (data1) - accounts payable (data70) - other current liability (data72).
Leverage$_{t-1}$	The decile rank of leverage for a firm as of the beginning of fiscal year *t*. Leverage is calculated as long term debt (data9) divided by total assets (data6).
Older$_{t-1}$	Equals one if a firm has been on CRSP for at least 9 years.
Stdret$_{t-1}$	The standard deviation of monthly return of the 12 months prior to the 2nd fiscal quarter end of fiscal year *t*.
Pf$_t$	The public float (in millions) for a firm as of the end of 2nd fiscal quarter of fiscal year *t* (time 1 in Figure 2).

Appendix B. News disclosure categories

News	Proportion of all news
Good News	
New contracts/products	19.28%
Sales amount announcement	10.68%
Earnings increase	7.08%
Sales increase	5.06%
Positive earnings	4.87%
Receiving new orders	4.74%
Corporation or executive win award/honor	3.41%
Product performance	1.64%
Other	4.30%
Bad News	
Negative earnings	5.82%
Sales decrease	5.56%
Earnings decrease	3.41%
Filing 10K amendments/accounting restatements	3.35%
Other	1.01%
Neutral News	
To hold conference call	4.74%
Appointment of management	3.92%
Company (executive) to present at conference (trade show, other public event)	3.60%
Change of directors	2.09%
Receiving notice from exchange about listing standards	1.26%
Settling litigation	1.01%
Other	3.16%
Total	100.00%

There are 1,582 news items for the 200 sample firm-quarter observations, including good news, bad news and neutral news, classified based on news headlines. Categories with more than 1% of the total news are listed separately, while those with less than 1% of the total news are grouped in the category "Other."

Table 1. Key Events and Definitions

April 12, 2002	The SEC proposed to accelerate the filing of quarterly reports and annual reports to modernize the periodic reporting system. [Source: SEC Release No. 33-8089.]
July 30, 2002	The Sarbanes-Oxley Act was signed into law.
September 5, 2002	The SEC adopted final rules regarding the acceleration of filing deadlines for reports on Form 10-K and Form 10-Q. The phase-in period for accelerated deadlines of quarterly and annual reports will begin for reports filed by companies that meet the definition of "accelerated filer" as of their first fiscal year ending on or after December 15, 2002. An accelerated filer is an issuer that: • had a public float of at least $75 million as of the last business day of the most recently completed second fiscal quarter; • as of such fiscal year-end has been subject to the reporting requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934 for at least 12 calendar months; • has filed at least one annual report under the Exchange Act; and • is not eligible to file abbreviated reports on Forms 10-KSB and 10-QSB. In general, an issuer is eligible to use Forms 10-KSB and 10-QSB if both its annual revenues and its public float, based on the closing price on any day within 60 days prior to fiscal year-end, are less than $25 million. Once a company becomes an accelerated filer, it remains an accelerated filer regardless of whether it continues to have a public float of $75 million or more, except that if the company subsequently becomes eligible to use Forms 10-KSB and 10-QSB, it will cease to be an accelerated filer until such time as it again satisfies the "accelerated filer" definition. [Source: SEC Release No. 33-8128]
May 27, 2003	The SEC voted to adopt rules concerning management's report on internal control (Section 404). Accelerated filers are expected to comply for fiscal years on or after June 15, 2004. All other issuers will be required to comply for their fiscal years ending on or after April 15, 2005. [Source: SEC Press Release No. 2003-66]

May 28, 2003	President George W. Bush signed the Jobs and Growth Tax Relief Reconciliation Act of 2003. The tax reform lowered the statutory personal tax rate for dividends from a maximum rate of 38.1% to a flat rate of 15%. It applied retroactively from the beginning of 2003.
Feb 24, 2004	The SEC approved an extension of the original compliance dates for the amendments related to internal control reporting. The compliance dates for companies that are "accelerated filers," are extended to fiscal years ending on or after November 15, 2004 (an extension of 5 months), and for non-accelerated filers and foreign private issuers, to fiscal years ending on or after July 15, 2005 (an extension of 3 months). [Source: SEC Press Release NO. 2004-21]
March 2, 2005	The SEC extended the Section 404 compliance dates for non-accelerated filers and foreign private issuers to its first fiscal year ending on or after July 15, 2006 (an extension of 1 year). [Source: SEC Press Release 2005-25]
September 21, 2005	The SEC voted to propose for extending the Section 404 compliance dates for non-accelerated filers to its first fiscal year ending on or after July 15, 2007 (an extension of 1 year) and adjust definition for accelerated filers. [Source: SEC Press Release NO. 2005-134]
December 21, 2005	SEC issued final rule regarding exiting the definition of accelerated filer status to provide easier exit. Under the new rules, a company may exit the accelerated filer status in the same year when their public float has dropped below $50 million. [Source: SEC Release No. 33-8644; 34-52989]
August 9, 2006	The SEC proposed to provide further relief for non-accelerated filers regarding the Section 404 compliance dates. The compliance date is moved to its first fiscal year ending on or after Dec15, 2007 (an extension of 6 months); the compliance date to provide an auditor's attestation report on interval control would be moved to a fiscal year ending on or after Dec. 15, 2008. [Source: SEC Press Release No. 2006-136. SEC Release No. 33-8731]

Table 2. Summary of hypotheses and findings

			Pred Sign Event* NA	Impact on[26]
1) Post-SOX non-accelerated filers are more likely to stay below the $75 million threshold than control firms.	H1	T6	+	
2) Actions undertaken by non-accelerated filers post-SOX to stay small:				
a) Decisions related to investment, payout, financing, non-affiliated shares:				
• reduce net investment in property, plant, and equipment, intangibles, and acquisitions	H2a	T7	-	Price
• pay out more cash to shareholders via ordinary and special dividends and share repurchases	H2b	T7	+	<u>Dividends:</u> impact on Price (no impact on returns including dividends) <u>Repurchases:</u> impact on # non-affl shares
• make fewer secondary stock offerings	H2c	T7	-	# non-affl shares
• decrease the number of shares held by non-affiliates of the firm	H2d	T 8	-	# non-affl shares
b) Actions in the second fiscal quarter:			2ndqtr *Event *NA	
• Disclose more bad news in the second fiscal quarter	H3a	T9	+	Price (short-term)
• Report lower accounting earnings in the second fiscal quarter	H3b	T9	-	Price (short-term)
• Engage in more insider selling in the second fiscal quarter		T9		

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[26] Some of the actions, such as dividend payments, share repurchases and SEOs can affect stock returns due to signaling effects. However, given the current context, the predictions on any potential signaling effects are unclear.

Table 3. Sample selection

Panel A: Base sample

	Observations dropped	# Firm-year observations	# firms
Compustat firms with fiscal year end data 1999-2005		50981	
Less: foreign firms	8543	42438	
Less: financial institutions and regulated industries	13771	28667	
Less: with less than 3 months in the control or the event period	9376	19291	
Less: firms with market value of equity at 2nd fiscal quarter end higher than 150 million	10581	8710	
Less: firms without previous financials to calculate ROA_{t-1}, MB_{t-1}, $Sales_{t-1}$, FCF_{t-1}, $Leverage_{t-1}$	567	8143	
Less: firms with missing public float as of the 2nd fiscal quarter end of fiscal year t or missing definition of filer status from 10-K	938	7205	
Less: firms delisted by the end of firm-year t	259	6946	
The base sample with firm-year observations		6946	
Event Period		**2664**	**1291**
Non-accelerated filers ($NA_t = 1$)		(1913)	(806)
Accelerated filers ($NA_t = 0$)		(751)	(485)
Control Period		**4282**	**2547**
Non-accelerated filers ($NA_t = 1$)		(3035)	(1706)
Accelerated filers ($NA_t = 0$)		(1247)	(841)
		Total	
The base sample with firm-year observations		6946	
The base sample with firm-quarter observations		23504	

Panel B: Sample selection for each test

		# observations
Likelihood of staying small (Section 5)		
The base sample firm-year observations		6946
Less: missing one year out public float or missing Fama-French industries classifications	632	
Resulting firm-year observations		6314
Investment, acquisition, cash payout and SEO (Sections 6.1 - 6.3)		
The base sample firm-year observations		6946
Change in non-affiliated shares (Section 6.7)		
The base sample firm-year observations		6946
Less: missing lagged changes in shares	1890	
Resulting firm-year observations		4056
News disclosures (Section 6.4)		
Randomly selected firm-quarter observations		200
Less: missing public float data	25	
Resulting firm-quarter observations		175
Quarterly earnings (Section 6.5)		
The base sample firm-quarter observations		23504
Less: missing unexpected quarterly earnings	325	
Resulting firm-quarter observations		23179
Insider Trading (Section 6.6)		
The base sample firm-quarter observations		23504
Less: missing lags of the following quarterly variables: roe, buy-and-hold return	230	
Resulting firm-quarter observations		23274

Table 4. Summary statistics

Panel A: Firm-year observations in the Event Period (June 1, 2003 – December 31, 2005)
The raw values of control variables are presented in the summary statistics and the correlation matrix. Variable definitions are in Appendix A.

Non-Accelerated filers					*Accelerated filers*				
Variables	**N**	**Mean**	**Median**	**Std Dev**	**Variables**	**N**	**Mean**	**Median**	**Std Dev**
Pf_t	1913	29.154*	24.808*	19.882	Pf_t	751	90.937	90.925	27.312
$NALrg_t$	1913	0.215*	0.000*	0.411	$NALrg_t$	751	0.000	0.000	0.000
$Less75_{t+1}$	1585	0.847*	1.000*	0.360	$Less75_{t+1}$	644	0.262	0.000	0.440
$Chinv_t$	1913	0.003	0.002	0.092	$Chinv_t$	751	0.006	0.002	0.099
Acq_t	1913	0.086*	0.000*	0.281	Acq_t	751	0.121	0.000	0.327
$Cashpay_t$	1913	0.109	0.000	0.311	$Cashpay_t$	751	0.111	0.000	0.314
$Chcashpay_t$	1913	0.088	0.000	0.283	$Chcashpay_t$	751	0.096	0.000	0.295
SEO_t	1913	0.019*	0.000*	0.138	SEO_t	751	0.045	0.000	0.208
$\Delta\ln(NonAffl_t)$	990	0.104	0.033	0.250	$\Delta\ln(NonAffl_t)$	341	0.091	0.036	0.228
ROA_{t-1}	1913	-0.045	0.057	0.385	ROA_{t-1}	751	-0.050	0.056	0.302
MB_{t-1}	1913	2.511*	1.424*	22.860	MB_{t-1}	751	3.056	1.648	7.133
$Sales_{t-1}$	1913	101.119*	40.520*	263.479	$Sales_{t-1}$	751	193.367	79.506	310.888
$FCFs_{t-1}$	1913	0.006*	-0.055*	0.318	$FCFs_{t-1}$	751	0.123	0.023	0.340
$Leverage_{t-1}$	1913	0.116*	0.016*	0.211	$Leverage_{t-1}$	751	0.102	0.004	0.191
$Older_{t-1}$	1913	0.647*	1.000	0.478	$Older_{t-1}$	751	0.583	1.000	0.493
$Stdret_{t-1}$	1913	0.188*	0.157*	0.134	$Stdret_{t-1}$	751	0.171	0.150	0.094

Table 4. Summary statistics (continued)

Panel B: Firm-year observations in the Control Period (January 1, 1999 – September 1, 2001)
Variable definitions are in Appendix A.

Non-Accelerated filers					*Accelerated filers*				
Variables	**N**	**Mean**	**Median**	**Std Dev**	**Variables**	**N**	**Mean**	**Median**	**Std Dev**
Pf_t	3035	21.562*	15.364*	19.709	Pf_t	1247	87.769	80.415	49.684
$NALrg_t$	3035	0.123*	0.000*	0.328	$NALrg_t$	1247	0.000	0.000	0.000
$Less75_{t+1}$	2912	0.912*	1.000*	0.284	$Less75_{t+1}$	1206	0.596	1.000	0.491
$Chinv_t$	3035	-0.002*	-0.001*	0.112	$Chinv_t$	1247	-0.010	-0.004	0.103
Acq_t	3035	0.097	0.000	0.295	Acq_t	1247	0.104	0.000	0.306
$Cashpay_t$	3035	0.071*	0.000*	0.256	$Cashpay_t$	1247	0.143	0.000	0.350
$Chcashpay_t$	3035	0.041*	0.000*	0.199	$Chcashpay_t$	1247	0.075	0.000	0.264
SEO_t	3035	0.012*	0.000*	0.107	SEO_t	1247	0.025	0.000	0.156
$\Delta \ln(NonAffl_t)$	1974	0.058*	0.010*	0.264	$\Delta \ln(NonAffl_t)$	751	0.030	0.010	0.206
ROA_{t-1}	3035	-0.018*	0.074*	0.334	ROA_{t-1}	1247	-0.004	0.089	0.298
MB_{t-1}	3035	2.675*	1.308*	19.062	MB_{t-1}	1247	2.491	1.540	13.075
$Sales_{t-1}$	3035	76.787*	34.010*	148.386	$Sales_{t-1}$	1247	249.495	115.541	435.405
$FCFs_{t-1}$	3035	-0.025*	-0.085*	0.271	$FCFs_{t-1}$	1247	0.020	-0.064	0.292
$Leverage_{t-1}$	3035	0.141*	0.057*	0.189	$Leverage_{t-1}$	1247	0.170	0.074	0.221
$Older_{t-1}$	3035	0.448	0.000	0.497	$Older_{t-1}$	1247	0.427	0.000	0.495
$Stdret_{t-1}$	3035	0.237*	0.193	0.185	$Stdret_{t-1}$	1247	0.221	0.189	0.142

* indicates significant differences in means and medians between accelerated firms and non-accelerated firms with a p-value less than 10%. Mean comparisons are based on t-test, while median comparisons are based on Wilcoxon ranked sum test.

Table 4. Summary statistics (continued)

Panel C. Mean differences between comparison groups
Variable definitions are in Appendix A.

Event Period, Non-accelerated - Accelerated				*Control Period, Non-accelerated - Accelerated*				*Difference in difference*			
Variables	**Mean**	**Std err**	**P>| t |**	**Variables**	**Mean**	**Std err**	**P>| t |**	**Variables**	**Mean**	**Std error**	**P>| t |**
Pf_t	-61.782	1.220	<.0001	Pf_t	-66.207	0.953	<.0001	Pf_t	4.424	1.548	0.004
$NALrg_t$	0.215	0.013	<.0001	$NALrg_t$	0.123	0.010	<.0001	$NALrg_t$	0.093	0.017	<.0001
$Less75_{t+1}$	0.584	0.017	<.0001	$Less75_{t+1}$	0.316	0.013	<.0001	$Less75_{t+1}$	0.269	0.021	<.0001
$Chinv_t$	-0.003	0.004	0.559	$Chinv_t$	0.008	0.004	0.026	$Chinv_t$	-0.010	0.006	0.067
Acq_t	-0.035	0.013	0.006	Acq_t	-0.008	0.010	0.440	Acq_t	-0.027	0.016	0.094
$Cashpay_t$	-0.002	0.013	0.889	$Cashpay_t$	-0.072	0.010	<.0001	$Cashpay_t$	0.070	0.016	<.0001
$Chcashpay_t$	-0.008	0.011	0.450	$Chcashpay_t$	-0.034	0.008	<.0001	$Chcashpay_t$	0.026	0.014	0.053
SEO_t	-0.026	0.006	<.0001	SEO_t	-0.013	0.005	0.004	SEO_t	-0.013	0.008	0.096
$\Delta\ln(NonAffl_t)$	0.013	0.016	0.404	$\Delta\ln(NonAffl_t)$	0.029	0.011	0.007	$\Delta\ln(NonAffl_t)$	-0.016	0.019	0.409
ROA_{t-1}	0.006	0.015	0.700	ROA_{t-1}	-0.013	0.011	0.242	ROA_{t-1}	0.019	0.019	0.306
MB_{t-1}	-0.545	0.793	0.492	MB_{t-1}	0.185	0.619	0.765	MB_{t-1}	-0.730	1.006	0.468
$Sales_{t-1}$	-92.247	11.651	<.0001	$Sales_{t-1}$	-172.708	9.101	<.0001	$Sales_{t-1}$	80.460	14.785	<.0001
$FCFs_{t-1}$	-0.117	0.013	<.0001	$FCFs_{t-1}$	-0.045	0.010	<.0001	$FCFs_{t-1}$	-0.072	0.016	<.0001
$Leverage_{t-1}$	0.014	0.009	0.113	$Leverage_{t-1}$	-0.029	0.007	<.0001	$Leverage_{t-1}$	0.043	0.011	0.000
$Older_{t-1}$	0.063	0.021	0.003	$Older_{t-1}$	0.021	0.017	0.201	$Older_{t-1}$	0.042	0.027	0.116
$Stdret_{t-1}$	0.017	0.007	0.012	$Stdret_{t-1}$	0.016	0.005	0.003	$Stdret_{t-1}$	0.001	0.009	0.896

Table 5. Correlation Matrix for firm-year observations

Variables	Pf_t	NA_t	$NAlrg_t$	$Less75_{t+1}$	$Chinv_t$	Acq_t	$Cashpay_t$	$Chcashpay_t$	SEO_t	$\Delta\ln(NonAffl_t)$	ROA_{t-1}	MB_{t-1}	$Sales_{t-1}$	$FCFs_{t-1}$	$Leverage_{t-1}$	$Older_{t-1}$	$Stdret_{t-1}$
Pf_t		**-0.68**	**0.28**	**-0.52**	**0.07**	**0.08**	**0.11**	**0.09**	**0.10**	**0.03**	**0.02**	**0.28**	**0.27**	**0.16**	**-0.06**	-0.02	**-0.05**
NA_t	**-0.72**		**0.22**	**0.45**	**0.02**	**-0.03**	**-0.07**	**-0.04**	**-0.06**	0.02	**-0.02**	**-0.09**	**-0.28**	**-0.09**	**-0.02**	**0.03**	**0.03**
$NAlrg_t$	**0.15**	**0.22**		**-0.09**	**0.07**	**0.05**	**0.03**	**0.04**	**0.04**	**0.05**	-0.01	**0.13**	-0.01	**0.06**	**-0.05**	-0.01	0.01
$Less75_{t+1}$	**-0.50**	**0.45**	**-0.09**		**-0.05**	**-0.09**	**-0.05**	**-0.06**	**-0.18**	**-0.22**	0.02	**-0.10**	**-0.12**	**-0.12**	**0.04**	0.01	0.00
$Chinv_t$	**0.06**	0.02	**0.05**	-0.05		**0.07**	0.01	**0.02**	**0.06**	**0.08**	**0.17**	**0.11**	**-0.04**	**0.05**	**-0.04**	**0.05**	**-0.05**
Acq_t	**0.06**	-0.03	**0.05**	-0.09	0.06		**0.03**	**0.05**	**0.08**	**0.07**	**0.06**	**0.04**	0.01	**0.04**	**-0.02**	**-0.05**	0.00
$Cashpay_t$	**0.09**	-0.07	0.03	-0.05	0.01	0.03		**0.80**	**-0.04**	**-0.13**	**0.22**	**-0.09**	**0.20**	**-0.04**	0.01	**0.18**	**-0.29**
$Chcashpay_t$	**0.07**	-0.04	0.04	-0.06	0.01	0.05	**0.80**		**-0.03**	**-0.06**	**0.18**	**-0.05**	**0.14**	**-0.03**	0.00	**0.13**	**-0.21**
SEO_t	**0.08**	-0.06	0.04	-0.18	0.07	0.08	-0.04	-0.03		**0.16**	**-0.04**	**0.05**	**-0.02**	**0.04**	0.01	**-0.04**	**0.04**
$\Delta\ln(NonAffl_t)$	-0.03	0.04	0.03	-0.20	0.09	0.09	-0.11	-0.06	0.19		**-0.20**	**0.17**	**-0.17**	0.03	**-0.04**	**-0.10**	**0.22**
ROA_{t-1}	0.00	-0.02	-0.01	0.02	0.11	0.06	0.22	0.18	-0.04	-0.20		**-0.09**	**0.46**	**-0.27**	**0.21**	**0.16**	**-0.36**
MB_{t-1}	**0.25**	-0.09	**0.13**	-0.10	0.09	0.04	-0.09	-0.05	0.05	0.14	-0.09		**-0.33**	**0.15**	**-0.16**	**-0.08**	**0.15**
$Sales_{t-1}$	**0.22**	-0.28	-0.01	-0.12	-0.04	0.01	0.20	0.14	-0.02	-0.15	0.46	-0.33		**-0.49**	**0.31**	**0.10**	**-0.29**
$FCFs_{t-1}$	**0.14**	-0.09	0.06	-0.13	0.04	0.04	-0.04	-0.03	0.04	0.02	-0.27	0.15	-0.49		**0.05**	**-0.13**	**0.08**
$Leverage_{t-1}$	**-0.05**	-0.02	-0.05	0.04	-0.04	-0.02	0.01	0.00	0.01	-0.02	0.21	-0.16	0.31	-0.33		**0.05**	**-0.09**
$Older_{t-1}$	**-0.02**	0.03	-0.01	0.01	0.04	-0.05	0.18	0.13	-0.04	-0.10	0.16	-0.08	0.10	-0.13	0.05		**-0.26**
$Stdret_{t-1}$	0.00	**0.05**	**0.03**	**0.02**	**-0.03**	0.00	**-0.19**	**-0.14**	0.01	**0.16**	**-0.31**	**0.12**	**-0.25**	**0.05**	**-0.09**	**-0.19**	

Pearson correlation coefficients appear in the lower diagonal and Spearman rank correlation coefficients appear in the upper diagonal. Bold numbers stand for correlations that are significant at 10% level for two-tailed tests. Variable definitions are in Appendix A.

Table 6. Test on the likelihood of staying small

$$prob(Less75_{t+1} = 1) = Logit(\beta_0 + \beta_1 NA_t + \beta_2 Event_t + \beta_3 Event_t NA_t + \sum_j \beta_j Controls) \qquad (1)$$

Dependent Variable		$Pr(Less75_{t+1} = 1)$	
Variables	Predicted Signs	Coef (stderr)	
Intercept		5.894	***
		(0.234)	
NA_t		-0.114	
		(0.132)	
$Event_t$		-1.258	***
		(0.120)	
$Event_t*NA_t$	+	**0.767**	***
		(0.164)	
Mkt_Rf_t		-1.393	***
		(0.211)	
SMB_t		-2.312	***
		(0.239)	
HML_t		-1.239	***
		(0.128)	
MOM_t		-1.077	***
		(0.206)	
$Indret_t$		-1.655	***
		(0.084)	
Include Pf_t *(linear, squared and cubic terms)*		Yes	
N		6314	
Pseudo R-2		0.525	

Results are based on a logit regression. Standard errors are in parentheses. Pseudo R2 (also called Max-rescaled R-square) is the original R2 divided by its upper bound, to account for the fact that the upper bound of the generalized R2 is less than 1 because the dependent variable is discrete (binary). Significance tests for test variables are based on one-tailed tests, and those for other variables are based on two-tailed tests, where *, **, and *** corresponds to a 10%, 5% and 1% significance levels. Main test variables are bolded. Variable definitions are in Appendix A.

Table 7. Tests on changes in investments, cash payout and SEO

$$Chinv_t = \beta_0 + \beta_1 NA_t + \beta_2 NALrg_t + \beta_3 Event_t + \beta_4 Event_t NA_t + \beta_5 Event_t NALrg_t + \sum_j \beta_j Controls \qquad (2)$$

$$prob(Acq_t = 1) = Logit(\beta_0 + \beta_1 NA_t + \beta_2 NALrg_t + \beta_3 Event_t + \beta_4 Event_t NA_t + \beta_5 Event_t NALrg_t + \sum_j \beta_j Controls) \qquad (2')$$

$$prob(Cashpay_t = 1) = Logit(\beta_0 + \beta_1 NA_t + \beta_2 NALrg_t + \beta_3 Event_t + \beta_4 Event_t NA_t + \beta_5 Event_t NALrg_t + \sum_j \beta_j Controls) \qquad (3)$$

$$prob(Chcashpay_t = 1) = Logit(\beta_0 + \beta_1 NA_t + \beta_2 NALrg_t + \beta_3 Event_t + \beta_4 Event_t NA_t + \beta_5 Event_t NALrg_t + \sum_j \beta_j Controls) \qquad (3')$$

$$prob(SEO_t = 1) = Logit(\beta_0 + \beta_1 NA_t + \beta_2 NALrg_t + \beta_3 Event_t + \beta_4 Event_t NA_t + \beta_5 Event_t NALrg_t + \sum_j \beta_j Controls) \qquad (4)$$

Dependent Variables		$Chinv_t$ (1)		$Pr(Acq_t=1)$ (2)			$Pr(Cashpay_t=1)$ (3)		$Pr(Chcashpay_t=1)$ (4)			$Pr(SEO_t=1)$ (5)	
Variables	Predicted Signs	Coef (stderr)		Coef (stderr)		Predicted Signs	Coef (stderr)		Coef (stderr)		Predicted Signs	Coef (stderr)	
Intercept		-0.055	***	-3.752	***		-5.900	***	-4.950	***		-6.683	***
		(0.009)		(0.322)			(0.575)		(0.518)			(0.776)	
NA_t		0.026	***	0.439	**		0.675	**	0.374			0.432	
		(0.005)		(0.192)			(0.297)		(0.285)			(0.451)	
$NALrg_t$		0.014	**	0.112			-0.564		-0.351			-0.142	
		(0.007)		(0.196)			(0.386)		(0.359)			(0.457)	
$Event_t$		0.010	**	0.146			-0.055		0.525	**		0.465	*
		(0.005)		(0.152)			(0.240)		(0.212)			(0.266)	
$Event_t*NA_t$	-	-0.002		-0.256	*	+	0.425	*	0.067		-	-0.132	
		(0.006)		(0.190)			(0.293)		(0.261)			(0.404)	
$Event_t*NALrg_t$	-	-0.033	***	-0.115		+	0.731	**	0.716	**	-	0.157	
		(0.008)		(0.241)			(0.430)		(0.384)			(0.497)	
ROA_{t-1}		0.006	***	0.096	***		0.268	***	0.223	***		-0.041	
		(0.001)		(0.017)			(0.033)		(0.029)			(0.038)	

	(1)		(2)		(3)		(4)		(5)	
MB_{t-1}	0.001	**	0.013		-0.148	***	-0.132	***	0.046	
	(0.001)		(0.018)		(0.032)		(0.029)		(0.037)	
$Sales_{t-1}$	-0.004	***	0.001		0.039		0.052		-0.041	
	(0.001)		(0.023)		(0.040)		(0.036)		(0.049)	
$FCFs_{t-1}$	0.000		0.055	***	0.060	*	0.004		0.044	
	(0.001)		(0.019)		(0.032)		(0.029)		(0.041)	
$Leverage_{t-1}$	-0.001		-0.008		-0.061	**	-0.062	***	0.125	***
	(0.000)		(0.016)		(0.025)		(0.022)		(0.034)	
$Older_{t-1}$	0.005	*	-0.277	***	0.444	***	0.473	***	-0.424	**
	(0.003)		(0.086)		(0.145)		(0.134)		(0.187)	
$Stdret_{t-1}$	-0.004		0.301		-3.541	***	-2.665	***	0.194	
	(0.009)		(0.266)		(0.881)		(0.778)		(0.539)	
lag(dependent variable)	-0.108	***	0.546	***	4.576	***	3.152	***	0.761	
	(0.012)		(0.121)		(0.138)		(0.127)		(0.484)	
Include Pf_t (linear and squared terms)	Yes		Yes		Yes		Yes		Yes	
N	6946		6946		6946		6946		6946	
Adj. R-2/Pseudo R-2	0.050		0.040		0.666		0.407		0.094	

Results with *Chinv_t* as the dependent variable are based on OLS regressions. The regressions for columns (2) to (5) are based on binary logit regressions. Standard errors are in parentheses. Pseudo R2 (also called Max-rescaled R2) is the original R2 divided by its upper bound, to account for the fact that the upper bound of the generalized R2 is less than 1 because the dependent variable is discrete (binary). Significance tests for test variables are based on one-tailed tests, and those for other variables are based on two-tailed tests, where *, **, and *** corresponds to a 10%, 5% and 1% significance levels. Main test variables are bolded. The control variables are decile ranks of lagged ROA, MB, Sales, FCF, Older, Stdret, and the lagged dependent variables. Variable definitions are in Appendix A.

Table 8. Tests on non-affiliated shares

$$\Delta \ln(NonAffl_t) = \beta_0 + \beta_1 NA_t + \beta_2 NALrg_t + \beta_3 Event_t + \beta_4 Event_t NA_t + \beta_5 Event_t NALrg_t + \sum_j \beta_j Controls \quad (5)$$

Dependent variable		$\Delta \ln(NonAffl_t)$	
		(1)	
	Predicted	Coef	
Variables	Signs	(stderr)	
Intercept		0.079	***
		(0.028)	
NA_t		-0.002	
		(0.016)	
$Event_t$		0.081	***
		(0.016)	
$NAlrg_t$		0.031	
		(0.021)	
$Event_t*NA_t$	**-**	**-0.003**	
		(0.019)	
$Event_t*NALrg_t$	**-**	**-0.043**	**
		(0.026)	
ROA_{t-1}		-0.012	***
		(0.002)	
MB_{t-1}		0.011	***
		(0.002)	
$Sales_{t-1}$		-0.006	***
		(0.002)	
$FCFs_{t-1}$		-0.005	***
		(0.002)	
$Leverage_{t-1}$		0.005	***
		(0.001)	
$Older_{t-1}$		-0.045	***
		(0.008)	
$Stdret_{t-1}$		0.188	***
		(0.029)	
lag(dependent variable)		-0.060	***
		(0.015)	
Include Pf_t (linear and squared terms)		Yes	
N		4056	
Adj. R-2		0.090	

Results are based on OLS regressions. Standard errors are in parentheses. Significance tests for test variables are based on one-tailed tests, and those for other variables are based on two-tailed tests, where *, **, and *** corresponds to a 10%, 5% and 1% significance levels. Main test variables are bolded. Variable definitions are in Appendix A.

Table 9.
Panel A. Tests on news disclosure, reported accounting earnings, and insider trading

$$Badnews_q = \beta_0 + \beta_1 NA_t + \beta_2 Event_t + \beta_3 Event_t NA_t + \beta_4 2ndqtr_q$$
$$+ \beta_5 2ndqtr_q NA_t + \beta_6 2ndqtr_q Event_t + \beta_7 2ndqtr_q Event_t NA_t \qquad (6)$$

$$prob(Pst\_UE_q = 1) = Logit(\beta_0 + \beta_1 NA_t + \beta_2 Event_t + \beta_3 Event_t NA_t$$
$$+ \beta_4 2ndqtr_q + \beta_5 2ndqtr_q NA_t + \beta_6 2ndqtr_q Event_t + \beta_7 2ndqtr_q Event_t NA_t) \qquad (7)$$

$$Netpercent\_r_q = \beta_0 + \beta_1 NA_t + \beta_2 Event_t + \beta_3 Event_t NA_t + \beta_4 2ndqtr_q$$
$$+ \beta_5 2ndqtr_q NA_t + \beta_6 2ndqtr_q Event_t + \beta_7 2ndqtr_q Event_t NA_t \qquad (8)$$

Dependent variable		$Badnews_q$			$\Pr(Pst\_UE_q = 1)$		$Netpercent\_r_q$	
		(1)			(2)		(3)	
	Predicted Signs	Coef (stderr)		Predicted Signs	Coef (stderr)		Coef (stderr)	
Intercept		0.167	*		0.033		0.038	**
		(0.097)			(0.057)		(0.017)	
NA_t		0.014			-0.070		-0.050	***
		(0.069)			(0.052)		(0.016)	
$Event_t$		-0.076			0.215	***	-0.052	***
		(0.062)			(0.058)		(0.018)	
$Event_t*NA_t$		-0.047			0.096		0.009	
		(0.084)			(0.068)		(0.021)	
$2ndqtr_q$		0.049			0.044		0.009	
		(0.077)			(0.074)		(0.022)	
$2ndqtr_q*NA_t$		-0.066			-0.065		0.047	*
		(0.097)			(0.088)		(0.027)	
$2ndqtr_q*Event_t$		0.027			0.263	**	0.123	***
		(0.095)			(0.129)		(0.039)	
$2ndqtr_q*Event_t*NA_t$	+	**0.289**	**	-	**-0.226**	*	**-0.105**	**
		(0.127)			**(0.152)**		**(0.046)**	
Include Pf_t (linear and squared terms)		Yes			Yes		Yes	
N		175			23179		23274	
Adj. R-2/Pseudo R-2		0.112			0.008		0.004	

Results for columns (1) and (3) are based on OLS regressions and column (2) uses logit regression. Standard errors are in parentheses. Significance tests for test variables are based on one-tailed tests, and those for other variables are based on two-tailed tests, where *, **, and *** corresponds to a 10%, 5% and 1% significance levels. Main test variables are bolded. Variable definitions are in Appendix A.

Table 9. (continued)
Panel B. Prediction model for insider trading

$$Netpercent_q = \alpha_0 + \alpha_1 option\_shrout_{q-1} + \alpha_2 ret_{q-1} + \alpha_3 roe_{q-1} + \alpha_4 size_{q-1} + \alpha_5 mktbk_{q-1} + \alpha_6 netpercent_{q-1}$$

| Dependent variable	$Netpercent_q$	
	Coef.	
Variables	(Stderr.)	
Intercept	0.200	***
	(0.015)	
option_shrout$_{q-1}$	0.321	*
	(0.190)	
Ret$_{q-1}$	-0.052	***
	(0.008)	
Roe$_{q-1}$	0.000	
	(0.001)	
Size$_{q-1}$	-0.024	***
	(0.004)	
Mktbk$_{q-1}$	0.000	
	(0.000)	
Netpercent$_{q-1}$	0.239	***
	(0.006)	
N	23274	
Adj. R2	0.065	

Results are based on OLS regression following the model in Cheng and Lo (2006). Standard errors are in parentheses. Significance tests are based on two-tailed tests, where *, **, and *** corresponds to a 10%, 5% and 1% significance levels. *Option_shrout$_{q-1}$*: The shares of options granted in quarter *q*-1 deflated by the number of shares outstanding in quarter *q*-1. *Ret$_{q-1}$*: The buy-and-hold return for quarter *q*-1. *Roe$_{q-1}$*: The income before extraordinary items (data25) for quarter *q*-1 from Compustat quarterly files deflated by the beginning book value of assets (data59) at the beginning of quarter *q*-1. *Size$_{q-1}$*: The market value measured at the beginning of quarter *q*. *Mktbk$_{q-1}$*: The market-to-book ratios at the beginning of quarter *q*. The dependent variable is defined in Appendix A.

Table 10. Summary of marginal effects in logit models

Model and dependent variable	Unconditional probability Mean (std. deviation)	Independent Variable	Marginal effect (std. error)
Outcome: Staying small. model (1) $Pr(Less75_{t+1}=1)$	0.771 (0.421)	$Event_t*NA_t$	0.085*** (0.019)
Acquisition test: model (2') $Pr(Acq_t=1)$	0.098 (0.297)	$Event*NA$	-0.022* (0.017)
		$Event_t*NALrg_t$	-0.019 (0.023)
Cash payout test: model (3) $Pr(Cashpay_t=1)$	0.098 (0.300)	$Event*NA$	0.019** (0.012)
		$Event_t*NALrg_t$	0.032** (0.018)
Cash payout test: model (3') $Pr(Chcashpay_t=1)$	0.066 (0.248)	$Event*NA$	0.012 (0.012)
		$Event_t*NALrg_t$	0.037** (0.019)
SEO test: model (4) $Pr(SEO_t=1)$	0.020 (0.139)	$Event*NA$	0.001 (0.009)
		$Event_t*NALrg_t$	0.003 (0.010)
Quarterly earnings test: model (7) $Pr(Pst\_UE_q=1)$	0.506 (0.500)	$2ndqtr*Event*NA$	-0.054* (0.037)

The marginal effects and standard errors for interacted variables in the logit models are obtained with the same method as the Stata command INTEFF, which uses formulas derived in Norton, Wang, and Ai (2004). Significance tests are based on one-tailed tests, where *, **, and *** corresponds to a 10%, 5% and 1% significance levels.

Figure 1. Time line of event period and control period
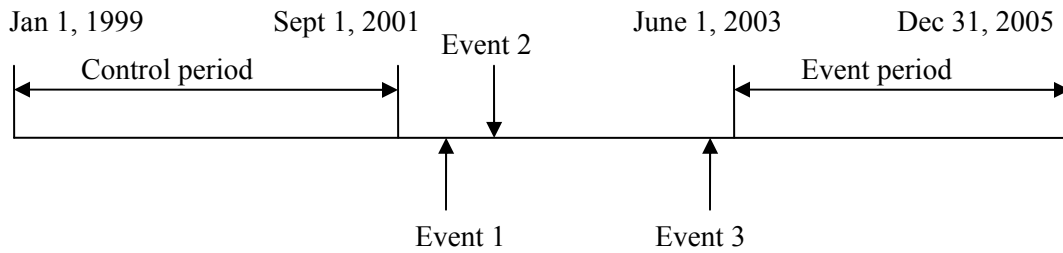
Event 1: July 30, 2002 the Sarbanes-Oxley Act was signed into law.
Event 2: Sept 5, 2002 SEC adopted final rules on the acceleration of 10-K and 10-Q filing deadlines.
Event 3: May 27, 2003 SEC voted to adopt rules regarding Section 404 of SOX.

Figure 2. Definition of a firm-year based on two consecutive 2nd fiscal quarter ends

Dependent variables:, Chinv$_t$, Acq$_t$,
Cashpay$_t$, Chcashpay$_t$, SEO$_t$ and
$\Delta \ln(NonAffl_t)$ are measured over firm
year observation t

NA_t *Less75$_{t+1}$*

fiscal year | Time 1 (t_1) | | Time 2 (t_2)
end, fiscal | 2nd fiscal quarter | fiscal year | 2nd fiscal
year t-1 | end, fiscal year t | end, fiscal | quarter end,
| mve<=$150mm | year t | fiscal year
| | | t+1